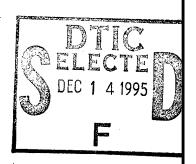
AIR FORCE HEALTH STUDY

An Epidemiologic Investigation of Health Effects in Air Force Personnel Following Exposure to Herbicides



SAIC Team

William D. Grubbs, Ph.D.

Michael B. Lustik, M.S.

Amy S. Brockman, M.S.

Scott C. Henderson, M.S.

Frank R. Burnett, M.S.

Rebecca G. Land, M.S.

Dawn J. Osborne, M.S.

Vanessa K. Rocconi, B.S.

Margaret E. Schrieber, B.A.

David E. Williams, M.D., SCRF

Project Manager: Manager E.B. Owens, Ph.D.

Statistical Task Manager: W.D. Grubbs

SAIC Editor: Jean M. Ault, B.A.

Air Force Team Col William H. Wolfe, M.D., M.P.H. Joel E. Michalek, Ph.D.

Col Judson C. Miner, D.V.M., M.P.H. Col Gary L. Henriksen, M.D., M.P.H.

Lt Col James A. Swaby, Ph.D., B.C.E.

Program Manager: R.W. Ogershok

SCIENCE APPLICATIONS INTERNATIONAL 1710 Goodridge Drive McLean, Virginia 22102

in conjunction with:

SCRIPPS CLINIC & RESEARCH FOUNDATION, LA JOLLA, CALIFORNIA

NATIONAL OPINION RESEARCH CENTER, CHICAGO, ILLINOIS

EPIDEMIOLOGIC RESEARCH DIVISION ARMSTRONG LABORATORY HUMAN SYSTEMS CENTER (AFMC) BROOKS AIR FORCE BASE, TEXAS 78235

DETRIBUTION STREET

Approved for public released

Distribution Unlimited

2 May 1995

Volume VII

1992 Followup Examination Results

May 1992 to May 1995

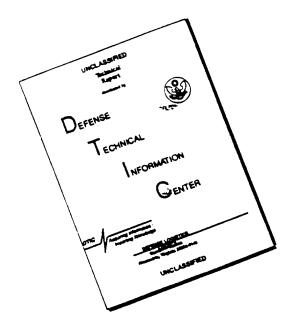
Contract Number F41624-91-C-1006 SAIC Project Number 01-0813-02-3005

(Distribution Unlimited)

19951212 086

DTIC QUALITY INSPECTED 1

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

AIR FORCE HEALTH STUDY

An Epidemiologic Investigation of Health Effects in Air Force Personnel Following Exposure to Herbicides

May 1995

Volume VII

1995 Followup Examination Results

Epidemiologic Research Division Armstrong Laboratory Human Systems Center (AFMC) Brooks Air Force Base, Texas 78235

| Accesi | on For | | | |
|--------------------|---------------------|----------|--|--|
| DTIC | ounced | \ | | |
| By | | | | |
| Availability Codes | | | | |
| Dist | Avail and Specia | | | |
| A-1 | | | | |

LIST OF APPENDICES

VOLUME VII

- APPENDIX A-1. SCRF Policies and Procedures-Dioxin Blood Collection and Dioxin Blood Processing
- APPENDIX A-2. Reanalysis of Malignant Systemic Cancer and Serum Insulin-Inclusion of 174 Additional Dioxin Assays
- APPENDIX B. 1992 Interval Questionnaire
- APPENDIX C. Physical Examination-1992 Examiner's Handbook and Physical Examination Forms
- APPENDIX D. Statistical Methods
- APPENDIX E-1. Dependent Variable-Covariate Associations for the General Health Assessment
- APPENDIX E-2. Interaction Tables for the General Health Assessment
- APPENDIX E-3. General Health Analysis Tables-Occupation Removed from Final Model
- APPENDIX F-1. Dependent Variable-Covariate Associations for the Neoplasia Assessment
- APPENDIX F-2. Interaction Tables for Neoplasia Assessment

TABLE OF CONTENTS - REPORT

EXECUTIVE SUMMARY VOLUME I **ACKNOWLEDGEMENTS** CHAPTER 1 - Introduction CHAPTER 2 - The Dioxin Assay CHAPTER 3 - Questionnaire Methodology CHAPTER 4 - Physical examination Methodology CHAPTER 5 - Study Selection and Participation CHAPTER 6 - Quality Control CHAPTER 7 - Statistical Methods CHAPTER 8 - Covariate Associations with Estimates of Dioxin Exposure CHAPTER 9 - General Health Assessment **VOLUME II** CHAPTER 10 - Neoplasia Assessment CHAPTER 11 - Neurological Assessment **VOLUME III** CHAPTER 12 - Psychological Assessment CHAPTER 13 - Gastrointestinal Assessment CHAPTER 14 - Dermatologic Assessment **VOLUME IV** CHAPTER 15 - Cardiovascular Assessment CHAPTER 16 - Hematologic Assessment CHAPTER 17 - Renal Assessment **VOLUME V** CHAPTER 18 - Endocrine Assessment CHAPTER 19 - Immunologic Assessment **VOLUME VI** CHAPTER 20 - Pulmonary Assessment CHAPTER 21 - Conclusions CHAPTER 22 - Future Directions **VOLUME VI** APPENDIX A - 1 through F-2 **VOLUME VII** APPENDIX G - 1 through I-4 **VOLUME IX** APPENDIX J - 1 through N-4

APPENDIX 0 - 1 through R

VOLUME X

APPENDIX A-1.

SCRF Policies and Procedures: Dioxin Blood Collection and Dioxin Blood Processing

ripps Clinic

| DEPARTMENT NAME: CLINICAL PATHOLOGY | P. P. NUMBER | ISSUE DATE: |
|--|--------------------------|-------------|
| AIR FORCE HEALTH STUDY - DIOXIN BLOOD COLLECTION | REVISION DATE: 8/5/8/ | PAGE 1 OF 4 |

.O PURPOSE

To collect blood samples for dioxin testing in accordance with Center for Disease Control standards.

.O SCOPE

Applies to all Air Force Health Study participants.

.O MATERIALS

- 3.1 Blood-pack unit without anticoagulant 600 ml
- 3.2 Alcohol swabs
- 3.3 Sepps
- 3.4 Sterile gauze
- 3.5 Adhesive tape
- 3.6 Balance
- 3.7 Coban
- 3.8 Unit holders

1.0 PROCEDURE

- 4.1 On the second day of the study, blood is drawn from patient with a 15 gauge needle into a blood pack unit without anticoagulant.
 - 4.1.1 Blood pack units have been previously tested by the CDC for Dioxin contamination. $\frac{1}{A-1-2}$

| Reviewed By/Date: | Reviewed By/Date: | Reviewed By/Date: | Reviewed By/Date: |
|-------------------|-------------------|-------------------|-------------------|
| Reviewed By/Date: | Reviewed By/Date: | Reviewed By/Date: | Reviewed By/Date: |

Scripps Clinic

P. P. NUMBER

PAGE 2 OF 4

THILE: CLINICAL PATHOLOGY
AIR FORCE HEALTH STUDY - DIOXIN BLOOD COLLECTION

- 4.2 Patients who have immunology studies have 250 ml of blood drawn. Patients not having immunology studies have 350 ml of blood drawn.
- 4.3 Select site for venipuncture.
 - 4.3.1 On patients who have not yet had their physical exam, the dominant arm is preferred.
- 4.4 Prepare site for venipuncture in accordance with CDC standards.
- 4.5 Perform venipuncture and securely tape needle and tubing to arm.
- 4.6 Blood is collected into unit bag.
 - 4.6.1 Amount of blood collected is determined by weighing sample on a balance.
 - 4.6.2 For 280 ml of blood, set balance at 320 gms For 350 ml of blood, set balance at 390 gms
 - 4.6.3 When amount needed is obtained clamp tubing with hemostat.
- 4.7 Remove needle from vein
- 4.8 Have patient apply pressure to site for several minutes.
- 4.9 Apply pressure bandage to site using gauge and Coban.
 - 4.9.1 Instruct patient not to remove bandage for at least 30 45 minutes.

ripps Clinic

P. P. NUMBER

PAGE 3 OF 4

TITLE:

CLINICAL PATHOLOGY AIR FORCE HEALTH STUDY - DIOXIN BLOOD COLLECTION

- 4.10 Clamp tubing twice with hand sealer and clips.
 - 4.10.1 Cut tubing and discard
 - 4.10.2 Dispose of needle in needle container
- 4.11 Label unit bag with pre-printed label.
 - 4.11.1 Write time drawn and initials on label
 - 4.11.2 Place label on plastic portion of unit pack
- 4.12 Place unit bag upright in vertical holder.
 - 4.12.1 Vertical holders are numbered 1-37.
 - 4.12.2 Units are placed in holders according to order of draw.
 - 4.12.3 Units are to remain upright at room temperature and allowed to clot for at least 7 hours.

5.0 SHORT DRAWS

5.1 In the event of a short draw, unit pack is to be weighed and the amount of blood noted on the unit label. "Short draw" should also be written on label in large letters.

6.0 MUTIPLE VENIPUNCTURES

6.1 If umable to collect sample with one venipuncture, ask patient if he is willing to be drawn again. If patient is willing start procedure from beginning.

Scripps Clinic

P. P. NUMBER

PAGE 4 OF 4

TITLE:

CLINICAL PATHOLOGY AIR FORCE HEALTH STUDY - DIOXIN BLOOD COLLECTION

- 6.2 If patient is unwilling to be redrawn, notify the nurse coordinator and Air Force monitor.
 - 6.2.1 Save labels and have test credited.

7.0 MAILING OF SAMPLES

- 7.1 Frozen samples are mailed twice weekly to Brooks AFB, TX via Airborne Overnight Service.
- 7.2 Mailing boxes are placed in styrofoam shipping tape.
 - 7.2.1 10 15 lbs of dry ice is packed around mailing boxes.
- 7.3 CDC shipping list is placed on top of styrofoam lid and beneath cardboard box lid.
- 7.4 Cardboard box is sealed with strapping tape.
- 7.5 Address label, dry ice label and "this side up" label are placed on box.
- 7.6 Mailing requisition is filled out and taken with shippers to shipping department.

c:\afhs\dioxcoll.bld



Scripps Clinic and Research Foundation — Clinic

| DEPARTMENT NAME: | P.P. NUMBER | ISSUE DATE |
|--|---------------|------------|
| SPECIMEN PROCESSING | | |
| TITLE | REVISION DATE | j |
| AIR FORCE HEALTH STUDY - DIOXIN BLOOD PROCESSING | | PAGE OF |

- 1.0 PURPOSE: To process blood samples for dioxin testing using Center for Disease Control Standards as a guideline.
- 2.0 SCOPE: Applies to Clinical Pathology Medical Technicians involved in processing dioxin samples.
- 3.0 MATERIALS:
 - 3.1 Transfer pack units 300ml
 - 3.2 Plasma transfer set
 - 3.3 Plasma extractor
 - 3.4 Vertical unit holders
 - 3.5 Vertical unit holder boxes
 - 3.6 Teflon lined lids
 - 3.7 Teflon stoppers
 - 3.8 Aluminum sealing caps
 - 3.9 Aluminum cap sealer
 - 3.10 Centrifuge bags
 - 3.11 Handsealer/stripper
 - 3.12 Shipping list
 - 3.13 Wheaton bottles

3.13.1 5ml, 10ml, 120ml

- 3.14 Styrofoam mailing boxes
- 3.15 Dry ice

4.0 PROCEDURE:

- 4.1 On the specific day the blood is drawn for dioxins, the units will be brought from the blood drawing station to specimen processing and allowed to clot, upright in their unit holders, at room temperature for a total of 7 hours.
- 4.2 Shipping list:
 - 4.2.1 The shipping list is a modified version of the list provided by the CDC.
 - 4.2.2 Shipping list is prepared as follows: remove top left section of patient's label from unit bag and place sequentially on shipping list.
 - 4.2.3 Specify any deviations from collection, storage and shipment protocols, and date of occurrence.
- 4.3 Centrifuging of unit bags
 - 4.3.1 Set temperature on floor model blood bank centrifuge between 4-10°C.

APPROVED BY:

APPROVED BY:

POSITION:

POSITION:

POSITION:

POSITION:

A-1-6



Scripps Clinic and Research Foundation — Clinic

| DEPARTMENT NAME: | P.P. NUMBER | ISSUE DATE | |
|--|---------------|------------|----|
| SPECIMEN PROCESSING | | | |
| TITLE | REVISION DATE | | |
| AIR FORCE HEALTH STUDY-DIOXIN BLOOD PROCESSING | | PAGE | OF |

- 4.3.2 Unit bags are centrifuged in the order they are drawn.
- 4.3.3 The units of blood are place inside plastic centrifuge bags and then into the centrifuge cups.
 - 4.3.3.1 The centrifuge cups are then balanced on the blood bank balance.
 - 4.3.3.2 Place two cups on the balance. If one centrifuge cup and associated unit of blood is heavier than the other, place small rubber stoppers into the centrifuge cups until units are balanced.
- 4.3.4 Centrifuge cups are placed into the centrifuge and spun for 15 minutes at 4500 rpms.
- 4.3.5 Balance next group of unit bags for centrifuging.
- 4.4 Transfer of serum from unit bags to transfer packs.
 - 4.4.1 Label transfer packs with patients aliquot label.
 - 4.4.2 Labeled transfer packs are place in vertical unit holders in the sequence they are to be transferred.
 - 4.4.3 Serum is transferred from the spun unit bag to the transfer pack by plasma extractor.
 - 4.4.3.1 Place the unit bag on the plasma extractor with side not containing manufacturers label toward you.
 - 4.4.3.2 Remove coupler cover of transfer pack unit.
 - 4.4.3.3 Expose outlet port of blood pack unit.
 - 4.4.3.4 Insert coupler into outlet port.
 - 4.4.3.5 Release handle of plasma extractor and express the serum into the transfer pack. Do not allow red cells to enter the transfer pack. It is important to transfer the predominant amount of serum while preventing red cell contamination.
 - 4.4.3.6 When the desired amount of serum is transferred, release the plasma extractor and clamp the tubing between the blood bag and the transfer pack using a hemostat clamp.

| | A-1-/ | |
|--------------|-----------|--|
| APPROVED BY: | POSITION: | |
| ADDRESS DV | POSITION: | |



| ARTMENT NAME: SPECIMEN PROC | ESSING | | P.P. NUMBER | ISSUE DATI | Ē |
|--------------------------------|--|---|----------------------|------------|----|
| E | ······································ | KIN BLOOD PROCESSING | REVISION DATE | PAGE | OF |
| | | | | • | |
| | 4.4.3.7 | | | | |
| | | apart using the Fenwal | | ıc | |
| | _ | sealer and severe tub | = | • | |
| 4. | | packs containing serum | | | |
| | | be respun are placed in | | aı | |
| | | ders and placed in vertic | cai holder boxes. | | |
| 4. | • • | of transfer packs. | | • • | |
| | 4.4.5.1 | | transfer packs Wil. | ı be | |
| | | spun at one time. | 1 4 100g C | 15 | |
| | 4.4.5.2 | • | | | |
| | | minutes at 4500 rpm in | n the floor model b. | 1000 | |
| | | bank centrifuge. | Master battles | | |
| | | from transfer packs to | | hala | |
| 4. | | oottles are labeled with | - | pers. | |
| | | eaton bottle S1 Serum saton bottle S3 Lipid | | | |
| | · · | eaton bottle S4 Serum | - | | |
| | | eaton bottle S2 serum | | | |
| | 4.5.1.1 | Insert the sharp end i | | let | |
| | 4.5.1.1 | ports in top of the ba | | | • |
| | 4.5.1.2 | <u>-</u> | = | • | |
| | 4.5.1.3 | - · | - | • | |
| | 4.5.1.4 | • • | | | |
| | 2000 | Wheaton bottles. | | | |
| | 4.5.1.5 | Open tubing and put 5m | al serum in "S3" bot | ttle, | |
| | | 10ml in "S4" and divid | | | |
| | | bottles "S1" and "S2". | | | |
| | 4.5.1.6 | Extract only the serum | being careful that | t | |
| • | | cells do not enter the | bottle. Recap and | d | |
| | | tighten. | | | |
| | 4.5.1.7 | Log in the serum sampl | les and store at -20 | O°C or | |
| | | less until shipment. | | • | |
| .0 SHORT DE | AWS: | | | | |
| 5.1 In | the amount of a | short draw, the partici | nant involved maybe | drawn | |

| | | A-1-8 |
|--------------|-----------|-------|
| APPROVED BY: | POSITION: | |
| APPROVED BY: | POSITION: | |



Scripps Clinic and Research Foundation — Clinic

| DEPARTMENT NAME: | P.P. NUMBER | ISSUE DATE | |
|--|---------------|------------|--|
| SPECIMEN PROCESSING | | | |
| TITLE | REVISION DATE | | |
| AIR FORCE HEALTH STUDY - DIOXIN BLOOD PROCESSING | | PAGE OF | |
| AIR TORON MALLET BEEFE BEEFE | | | |

aliquoting serum into the Wheaton bottles they may be pooled from both units.

- 6.0 MAILING OF SAMPLES:
 - 6.1 Frozen samples are mailed twice weekly to Brookes AFB, TX via Airborne overnight mail.
 - 6.2 Specimens are placed in styrofoam shipping boxes.6.2.1 10-15lbs of dry ice is packed around the specimens.
 - 6.3 A CDC shipping list is placed on top of the styrofoam lid and beneath the cardboard box lid.
 - 6.4 Cardboard box is sealed with strapping tape.
 - 6.5 Address label, dry ice label and "This side up" label are placed on box.
 - 6.6 Mailing requisition is filled out and taken with shipper to shipping department.

AFHS\DXNPRCC.BB

| APPROVED BY: | POSITION: |
|--------------|-----------|
| Ru | |
| APPROVED BY: | POSITION: |

A-1-9

APPENDIX A-2.

Reanalysis of Malignant Systemic Cancer and Serum Insulin Inclusion of 174 Additional Dioxin Assays

Table A-2-1.
Comparison of Analyses for Malignant Systemic Neoplasms

| | | | Chapter 10 (Table 10-16) | Analysis with Additional Data (Table A-2-3) |
|-------|------------|-----------------------------------|-----------------------------|---|
| Model | Analysis | Cohort | Relative Risk (p-Value) | Relative Risk (p-Value) |
| 2 . | Unadjusted | RH: Current Dioxin >10 ppt | 0.63 (0.004) | 0.62 (0.004) |
| | Adjusted | RH: Current Dioxin > 10 ppt | 0.72 (0.073) | 0.76 (0.139) |
| 3 | Unadjusted | Background RH (vs. Comparisons) | 1.03 (0.914) | 1.06 (0.832) |
| | | Low RH (vs. Comparisons) | 1.87 (0.024) | 1.96 (0.013) |
| | | High RH (vs. Comparisons) | 0.67 (0.309) | 0.68 (0.327) |
| | | Low + High RH (vs. Comparisons) | 1.26 (0.356) | 1.30 (0.285) |
| | | | | |
| | Adjusted | Background RH (vs. Comparisons) | 0.94 (0.834) | 0.96 (0.891) |
| | | Low RH (vs. Comparisons) | 1.72 (0.060) | 1.78 (0.041) |
| | | High RH (vs. Comparisons) | 0.90 (0.801) | 0.90 (0.783) |
| | | Low + High RH (vs. Comparisons) | 1.37 (0.220) | 1.39 (0.183) |
| 4 | Unadjusted | All Ranch Hands w/ Current Dioxin | 0.94 (0.585) | 0.95 (0.599) |
| | Adjusted | All Ranch Hands w/ Current Dioxin | 1.06 (0.537) | 1.06 (0.620) |
| | | | | |
| 5 | Unadjusted | All Ranch Hands w/ Current Dioxin | 0.99 (0.872) | 0.99 (0.899) |
| | Adjusted | All Ranch Hands w/ Current Dioxin | 1.10 (0.359) | 1.09 (0.411) |
| | | | | |
| 6 | Unadjusted | All Ranch Hands w/ Current Dioxin | 0.95 (0.585) | 0.95 (0.604) |
| | Adjusted | All Ranch Hands w/ Current Dioxin | 1.08 (0.506) | 1.06 (0.606) |

Table A-2-2.
Comparison of Analyses for Serum Insulin (Continuous, Nondiabetics)

| | | | Chapter 18 (Table 18-40) | Analysis with Additional Data (Table A-2-5) |
|-------|------------|---|--|---|
| Model | Analysis | Cohort | Difference of Means or Slope (p-Value) | Difference of Means or Slope (p-Value) |
| 2 | Unadjusted | RH: Curr. Dioxin >10 ppt (Slope) | 0.0639 (0.048) | 0.0612 (0.058) |
| | Adjusted | RH: Curr. Dioxin > 10 ppt (Slope) | 0.0729 (0.035) | 0.0726 (0.036) |
| 3 | Unadjusted | Background RH (vs. Comparisons) | -4.58 (0.170) | -3.86 (0.228) |
| | | Low RH (vs. Comparisons) | -0.12 (0.977) | 0.49 (0.905) |
| | | High RH (vs. Comparisons) | 7.48 (0.083) | 6.70 (0.108) |
| | | Low + High RH (vs. Comparisons) | 3.61 (0.266) | 3.61 (0.253) |
| | | | | |
| | Adjusted | Background RH (vs. Comparisons) | -2.56 (0.365) | -2.46 (0.362) |
| | | Low RH (vs. Comparisons) | -1.61 (0.631) | -1.81 (0.585) |
| | | High RH (vs. Comparisons) | 5.97 (0.104) | 4.89 (0.168) |
| | | Low + High RH (vs. Comparisons) | 2.10 (0.437) | 1.54 (0.558) |
| 4 | Unadjusted | All Ranch Hands w/ Curr. Dioxin (Slope) | 0.1259 (<0.001) | 0.1205 (<0.001) |
| | Adjusted | All Ranch Hands w/ Curr. Dioxin (Slope) | 0.0529 (0.025) | 0.0453 (0.048) |
| | | | | |
| 5 | Unadjusted | All Ranch Hands w/ Curr. Dioxin (Slope) | 0.1263 (<0.001) | 0.1200 (<0.001) |
| | Adjusted | All Ranch Hands w/ Curr. Dioxin (Slope) | 0.0646 (0.001) | 0.0568 (0.003) |
| | | | | |
| 6 | Unadjusted | All Ranch Hands w/ Curr. Dioxin (Slope) | 0.0960 (<0.001) | 0.0930 (<0.001) |
| | Adjusted | All Ranch Hands w/ Curr. Dioxin (Slope) | 0.0351 (0.092) | 0.0282 (0.160) |

Table A-2-3.
Analysis of Malignant Systemic Neoplasms

| a) MODEL 1: RANCH HANDS VS. COMPARISONS — UNADJUSTED | | | | | | | |
|--|------------|-------|----------------|----------------------------------|---------|--|--|
| Occupational Category | Group | n | Percent Yes | Est. Relative Risk (95% C.I.) | p-Value | | |
| All | Ranch Hand | 943 | 5.0 | 1.17 (0.78,1.74) | 0.507 | | |
| | Comparison | 1,280 | 4.3 | | | | |
| Officer | Ranch Hand | 361 | 6.1 | 0.95 (0.54,1.67) | 0.980 | | |
| Officer | Comparison | 502 | 6.4 | | | | |
| Enlisted Flyer | Ranch Hand | 160 | 8.1 | 1.54 (0.67,3.54) | 0.414 | | |
| Emisted Flyer | Comparison | 203 | 5.4 | | | | |
| Enlisted Groundcrew | Ranch Hand | 422 | 2.8 | 1.37 (0.61,3.09) | 0.575 | | |
| Emision Grounderow | Comparison | 575 | 2.1 | | | | |

| b) MODEL 1: RANCH HANDS VS. COMPARISONS — ADJUSTED | | | | | | |
|--|----------------------------------|---------|--------------------------------|--|--|--|
| Occupational Category | Adj. Relative Risk (95% C.I.) | p-Value | Covariate Remarks ^a | | | |
| All | 1.16 (0.77,1.75) | 0.479 | AGE (p < 0.001) | | | |
| Officer | 0.94 (0.53,1.66) | 0.820 | PACKYR $(p=0.051)$ | | | |
| Enlisted Flyer | 1.51 (0.65,3.52) | 0.340 | | | | |
| Enlisted Groundcrew | 1.37 (0.60,3.14) | 0.454 | | | | |

^a Covariates and associated p-values correspond to final model based on all participants with available data.

Table A-2-3. (Continued) Analysis of Malignant Systemic Neoplasms

| c) MODEL 2: RANCH HANDS — INITIAL DIOXIN — UNADJUSTED | | | | | | | |
|---|--------------|-----------------|--|----------------------------|--|--|--|
| Initial Dioxin | Category Sum | mary Statistics | Analysis Results for Log ₂ (Ini | itial Dioxin) ^a | | | |
| Initial Dioxin | n | Percent Yes | Estimated Relative Risk (95% C.I.) ^b | p-Value | | | |
| Low | 171 | 7.0 | 0.62 (0.44,0.88) | 0.004 | | | |
| Medium | 176 | 8.0 | | | | | |
| High | 177 | 1.7 | | | | | |

| | d) MODEL 2: RANCH HAN | DS — INITIAL DIOX | IN — ADJUSTED |
|-----|--|--------------------------------------|--|
| | Analysis Result | s for Log ₂ (Initial Diox | in) ^c |
| n | Adj. Relative Risk (95% C.I.) ^b | p-Value | Covariate Remarks |
| 524 | 0.76 (0.52,1.11)** | 0.139** | INIT*PACKYR (p=0.012) AGE (p<0.001) DC (p=0.143) |

^a Adjusted for percent body fat at the time of duty in SEA and change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin.

Note: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt. INIT = Log_2 (initial dioxin).

^b Relative risk for a twofold increase in initial dioxin.

^c Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

^{**} Log_2 (initial dioxin)-by-covariate interaction (0.01 < $p \le 0.05$); adjusted relative risk, confidence interval, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table A-2-4 for further analysis of this interaction.

Table A-2-3. (Continued)
Analysis of Malignant Systemic Neoplasms

| e) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — UNADJUSTED | | | | | | |
|---|-------|----------------|--|---------|--|--|
| Dioxin Category | n | Percent Yes | Est. Relative Risk (95% C.L.) ^{ab} | p-Value | | |
| Comparison | 1,199 | 4.1 | | | | |
| Background RH | 398 | 4.0 | 1.06 (0.60,1.91) | 0.832 | | |
| Low RH | 256 | 8.2 | 1.96 (1.15,3.35) | 0.013 | | |
| High RH | 268 | 3.0 | 0.68 (0.32,1.47) | 0.327 | | |
| Low plus High RH | 524 | 5.5 | 1.30 (0.81,2.09) | 0.285 | | |

| f) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED | | | | | | |
|---|-------|--|---------|-----------------------------------|--|--|
| Dioxin Category | n | Adj. Relative Risk (95% C.I.) ^{ac} | p-Value | Covariate Remarks | | |
| Comparison | 1,197 | | | AGE (p<0.001) PACKYR (p=0.117) | | |
| Background RH | 397 | 0.96 (0.53,1.74) | 0.891 | | | |
| Low RH | 256 | 1.78 (1.02,3.09) | 0.041 | | | |
| High RH | 268 | 0.90 (0.41,1.96) | 0.783 | | | |
| Low plus High RH | 524 | 1.39 (0.85,2.28) | 0.183 | | | |

^a Relative risk and confidence interval relative to Comparisons.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Adjusted for percent body fat at the time of duty in SEA and change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin.

^c Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Table A-2-3. (Continued) Analysis of Malignant Systemic Neoplasms

| | Cui | rent Dioxin Cate Percent Yes/(n) | gory | Analysis Results for (Current Dioxin | |
|--------------------|--------------|-------------------------------------|--------------|---|---------|
| Model ^a | Low | Medium | High | Est. Relative Risk (95% C.I.) ^b | p-Value |
| 4 | 3.8 (317) | 8.0 (299) | 2.9 (306) | 0.95 (0.77,1.16) | 0.599 |
| 5 | 4.5 (314) | 5.6 (302) | 4.6 (306) | 0.99 (0.83,1.18) | 0.899 |
| 6° | 4.5 (313) | 5.6 (302) | 4.6 (306) | 0.95 (0.79,1.15) | 0.604 |

| | b) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED | | | | | | | | |
|----------------|---|-------------------------|---------|---|--|--|--|--|--|
| | Analysis Results for Log ₂ (Current Dioxin + 1) Adj. Relative Risk | | | | | | | | |
| Modela | n | (95% C.I.) ^b | p-Value | Covariate Remarks | | | | | |
| 4 | 921 | 1.06 (0.84,1.35)** | 0.620** | CURR*DC (p=0.014) AGE (p<0.001) PACKYR (p=0.084) | | | | | |
| 5 | 921 | 1.09 (0.89,1.33)** | 0.411** | CURR*PACKYR (p=0.037) CURR*DC (p=0.022) AGE (p<0.001) | | | | | |
| 6 ^d | 920 | 1.06 (0.85,1.31)** | 0.606** | CURR*PACKYR (p=0.036) CURR*DC (p=0.021) AGE (p<0.001) | | | | | |

^a Model 4: Log₂ (lipid-adjusted current dioxin + 1).

Note: Model 4: Low = \leq 8.1 ppt; Medium = >8.1-20.5 ppt; High = >20.5 ppt. Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq. CURR = Log₂ (current dioxin + 1).

Model 5: Log_2 (whole-weight current dioxin + 1).

Model 6: Log₂ (whole-weight current dioxin + 1), adjusted for log₂ total lipids.

^b Relative risk for a twofold increase in current dioxin.

^c Adjusted for log₂ total lipids.

^d Adjusted for log₂ total lipids in addition to covariates specified under "Covariate Remarks" column.

^{**} Log₂ (current dioxin + 1)-by-covariate interaction (0.01 < p≤0.05); adjusted relative risk, confidence interval, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table A-2-4 for further analysis of this interaction.

Table A-2-4.
Interaction Table for Malignant Systemic Neoplasms

| a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED (Initial Dioxin-by-Lifetime Cigarette Smoking History: Table A-2-3) | | | | | | |
|---|-----------------------|----------------|--------------------|--|---------|--|
| Initial Dioxin Category Summary Statistics | | | | Analysis Results for Log ₂ (Initial Dioxi | | |
| Stratum | Initial Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ² | p-Value | |
| 0 pack-years | Low Medium High | 45 39 54 | 8.9 2.6 0.0 | 0.29 (0.07,1.20) | 0.088 | |
| >0-10 pack-years | Low Medium High | 50 45 69 | 8.0 2.2 1.5 | 0.47 (0.18,1.22) | 0.122 | |
| >10 pack-years | Low Medium High | 76 92 54 | 5.3 13.0 3.7 | 1.04 (0.67,1.60) | 0.864 | |

| | b) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Degreasing Chemical Exposure: Table A-2-3) | | | | | | | |
|--|---|-------------------|--------------------|--|---------|--|--|--|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (Cu Adjusted Relative Risk (95% C.I.) ^b | p-Value | | | |
| No | Low Medium High | 165 112 65 | 1.8 11.6 4.6 | 1.53 (1.07,2.19) | 0.020 | | | |
| Yes | Low Medium High | 151 187 241 | 6.0 5.9 2.5 | 0.84 (0.62,1.14) | 0.270 | | | |

Table A-2-4. (Continued) Interaction Table for Malignant Systemic Neoplasms

| c) MODEL 5: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Lifetime Cigarette Smoking History: Table A-2-3) | | | | | | | |
|---|------------------------------------|-------------------|---|----------------------------|-------|--|--|
| Current Di | oxin Category Current Dioxin | Summary n | Analysis Results for Log ₂ (Control Adjusted Relative Risk (95% C.I.) ^b | urrent Dioxin + 1) p-Value | | | |
| 0 pack-years | Low Medium High | 89 82 79 | 4.5 6.1 1.3 | 0.81 (0.49,1.33) | 0.399 | | |
| >0-10 pack- years | Low Medium High | 101 79 105 | 1.0 6.3 1.0 | 0.99 (0.61,1.62) | 0.980 | | |
| >10 pack-years | Low Medium High | 124 140 122 | 7.3 5.0 9.8 | 1.20 (0.93,1.55) | 0.171 | | |

| Curren | t Dioxin Category | Summary | Analysis Results for Log ₂ (Co | urrent Dioxin + | |
|---------|-------------------|---------|---|---|---------|
| Stratum | Current Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^b | p-Value |
| No | Low | 156 | 2.6 | 1.45 (1.05,1.99) | 0.023 |
| | Medium | 120 | 7.5 | | |
| | High | 66 | 9.1 | | |
| Yes | Low | 158 | 6.3 | 0.92 (0.72,1.18) | 0.496 |
| | Medium | 181 | 4.4 | | |
| | High | 240 | 3.3 | | |

Table A-2-4. (Continued) Interaction Table for Malignant Systemic Neoplasms

| Current Die | oxin Category | Summary | Analysis Results for Log ₂ (Current Dioxin | | |
|----------------|-------------------|---------|---|---|---------|
| Stratum | Current Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^b | p-Value |
| 0 pack-years | Low | 89 | 4.5 | 0.79 (0.48,1.32) | 0.371 |
| , parties y | Medium | 82 | 6.1 | | |
| | High | 79 | 1.3 | | |
| >0-10 pack- | Low | 101 | 1.0 | 0.98 (0.60,1.60) | 0.938 |
| vears | Medium | 79 | 6.3 | | |
| , | High | 105 | 1.0 | | |
| >10 pack-years | Low | 123 | 7.3 | 1.17 (0.88,1.54) | 0.276 |
| >10 pack-years | Medium | 140 | 5.0 | | |
| | High | 122 | 9.8 | | |

| | f) MODEL 6: (Current D | RANCH I | HANDS — Clegreasing Che | JRRENT DIOXIN — ADJUSTE emical Exposure: Table A-2-3) | D |
|-----------------|--------------------------------|-------------------|--|--|-------|
| Current Stratum | Dioxin Category Current Dioxin | Summary n | Analysis Results for Log ₂ (Cu Adjusted Relative Risk (95% C.I.) ^b | rrent Dioxin + 1 p-Value | |
| No | Low Medium High | 156 120 66 | 2.6 7.5 9.1 | 1.41 (1.01,1.96) | 0.042 |
| Yes | Low Medium High | 157 181 240 | 6.4 4.4 3.3 | 0.89 (0.68,1.16) | 0.390 |

^a Relative risk for a twofold increase in initial dioxin.

Note: Model 2: Low = 39-98 ppt; Medium = > 98-232 ppt; High = > 232 ppt. Model 4: Low = \le 8.1 ppt; Medium = > 8.1-20.5 ppt; High = >20.5 ppt.

Models 5 and 6: Low = \leq 46 ppq; Medium = > 46-128 ppq; High = > 128 ppq.

^b Relative risk for a twofold increase in current dioxin.

Table A-2-5.
Analysis of Serum Insulin (mIU/ml) (Nondiabetics) (Continuous)

| a) MODEL 1: RANCH HANDS VS. COMPARISONS — UNADJUSTED | | | | | | | | |
|--|--------------------------|--------------|--------------------|---|----------------------|--|--|--|
| Occupational Category | Group | n | Mean ^{ab} | Difference of Means (95% C.I.) ^c | p-Value ^d | | | |
| AII | Ranch Hand Comparison | 808 1,098 | 73.88 74.17 | -0.29 | 0.923 | | | |
| Officer | Ranch Hand Comparison | 310 444 | 69.90 66.07 | 3.83 | 0.374 | | | |
| Enlisted Flyer | Ranch Hand Comparison | 137 166 | 75.63 85.27 | -9.64 | 0.225 | | | |
| Enlisted Groundcrew | Ranch Hand Comparison | 361 488 | 74.29 75.99 | -1.70 | 0.703 | | | |

| | b) MODE | L1: F | RANCH HAN | IDS VS. COMPARISO | NS — ADJU | STED |
|--------------------------|--------------------------|--------------|----------------------------|---|----------------------|--|
| Occupational Category | Group | n | Adj. Mean ^{ab} | Difference of Adj. Means (95% C.I.) ^c | p-Value ^d | Covariate Remarks ^e |
| All | Ranch Hand Comparison | 794 1,081 | 58.55** 58.64** | -0.08 ** | 0.968** | GROUP*BFAT (p=0.017) |
| Officer | Ranch Hand Comparison | 306 441 | 64.42** 61.81** | 2.61 ** | 0.463** | AGE (p<0.001) FAST (p=0.597) RACE*OCC (p=0.024 |
| Enlisted Flyer | Ranch Hand Comparison | 134 163 | 48.88** 56.22** | 7.34 ** | 0.113** | RACE*PERS (p=0.029) |
| Enlisted Groundcrew | Ranch Hand Comparison | 354 477 | 60.47** 59.82** | 0.65 ** | 0.839** | PERS*FAMDIAB (p=0.037) |

^a Transformed from the natural logarithm scale.

^b Adjusted for fasting status.

^c Difference of means after transformation to original scale; confidence interval on difference of means not presented because analysis was performed on natural logarithm scale.

^d P-values based on difference of means on natural logarithm scale.

^e Covariates and associated p-values correspond to final model based on all participants with available data.

^{**} Group-by-covariate interaction (0.01 < p ≤ 0.05); adjusted mean, difference of adjusted means, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table A-2-6 for further analysis of this interaction.

Table A-2-5. (Continued) Analysis of Serum Insulin (mIU/ml) (Nondiabetics) (Continuous)

| Initial Dic | oxin Category | Summary Stat | tistics | Analysis l | Results for Log ₂ (Init | ial Dioxin) ^b |
|----------------|---------------|-------------------|----------------------------|----------------|------------------------------------|--------------------------|
| Initial Dioxin | п | Mean ^a | Adj. Mean ^{ab} | \mathbb{R}^2 | Slope (Std. Error) ^c | p-Value |
| Low | 143 | 70.29 | 72.62 | 0.119 | 0.0612 (0.0321) | 0.058 |
| Medium | 145 | 73.47 | 75.33 | | | |
| High | 143 | 86.39 | 81.53 | | | |

| | d) MOD | EL 2: RANC | H HANDS | — INITIAL DIO | XIN — AD | JUSTED |
|---|--------|----------------------------|----------------|----------------------------|----------|--|
| Initial Dioxin Category Summary Statistics | | | | Analysis Results | | |
| Initial Dioxin | n | Adj. Mean ^{ad} | R ² | Adj. Slope (Std. Error) | p-Value | Covariate Remarks |
| Low | 143 | 66.87 | 0.270 | 0.0726 (0.0344) | 0.036 | AGE*BFAT (p=0.010) BFAT*OCC (p=0.038) |
| Medium | 145 | 72.41 | | | rapi | Diff. Good (|
| High | 143 | 81.54 | | | * | |

^a Transformed from natural logarithm scale.

Note: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt.

^b Adjusted for percent body fat at the time of duty in SEA and change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin.

^c Slope and standard error based on natural logarithm of serum insulin versus log₂ (initial dioxin).

^d Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Table A-2-5. (Continued) Analysis of Serum Insulin (mIU/ml) (Nondiabetics) (Continuous)

| e) MODEL 3: RANC | H HANDS A | ND COMP. | ARISONS | BY DIOXIN CATEGORY - | unadjusted |
|------------------|-----------|--------------------|----------------------------|---|----------------------|
| Dioxin Category | n | Mean ^{ab} | Adj. Mean ^{ac} | Difference of Adj. Mean vs. Comparisons (95% C.L.) ^d | p-Value ^e |
| Comparison | 1,031 | 76.85 | 66.88 | | |
| Background RH | 357 | 66.69 | 63.02 | -3.86 | 0.228 |
| Low RH | 210 | 79.17 | 67.37 | 0.49 | 0.905 |
| High RH | 221 | 92.92 | 73.58 | 6.70 | 0.108 |
| Low plus High RH | 431 | 86.22 | 70.49 | 3.61 | 0.253 |

| f) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED | | | | | | | | | |
|---|-------|----------------------------|---|----------------------|--------------------------------------|--|--|--|--|
| Dioxin Category | n | Adj. Mean ^{af} | Difference of Adj. Mean vs. Comparisons (95% C.I.) ^d | p-Value ^e | Covariate Remarks | | | | |
| Comparison | 1,014 | 58.10** | | | DXCAT*AGE (p=0.037) | | | | |
| | 254 | FF | 2.46 ** | 0.362** | FAST (p=0.417) RACE*OCC (p=0.007) | | | | |
| Background RH | 354 | 55.64** | -2.46 ** | 0.362 | OCC*PERS (p=0.015) | | | | |
| Low RH | 204 | 56.29** | -1.81 ** | 0.585** | PERS*FAMDIAB (p=0.045) | | | | |
| High RH | 216 | 62.99** | 4.89 ** | 0.168** | • | | | | |
| Low plus High RH | 420 | 59.64** | 1.54 ** | 0.558** | | | | | |

^a Transformed from natural logarithm scale.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

DXCAT = Categorized Dioxin.

^b Adjusted for fasting status.

^c Adjusted for fasting status, percent body fat at the time of duty in SEA and change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin.

^d Difference of adjusted means after transformation to original scale; confidence interval on difference of adjusted means not presented because analysis was performed on natural logarithm scale.

e P-value is based on difference of means on natural logarithm scale.

f Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

^{**} Categorized dioxin-by-covariate interaction (0.01 < p ≤ 0.05); adjusted mean, difference of adjusted means, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table A-2-6 for further analysis of this interaction.

Table A-2-5. (Continued) Analysis of Serum Insulin (mIU/ml) (Nondiabetics) (Continuous)

| | Cur | rent Dioxin Cate Mean ^{ab} /(n) | Analysis Results for Log ₂ (Current Dioxin + 1) | | | |
|--------------------|----------------|---|--|----------------|------------------------------------|---------|
| Model ^c | Low | Medium | High | R ² | Slope (Std. Error) ^d | p-Value |
| 4 | 36.33 (290) | 43.66 (246) | 52.10 (252) | 0.041 | 0.1205 (0.0213) | < 0.001 |
| 5 | 35.89 (290) | 44.27 (251) | 54.34 (247) | 0.054 | 0.1200 (0.0183) | < 0.001 |
| 6 ^e | 38.00 (289) | 44.48 (251) | 51.31 (247) | 0.081 | 0.0930 (0.0191) | <0.001 |

| | h) MOI | DELS 4, 5, A | AND 6: R | ANCH F | IANDS — CURF | RENT DIOX | (IN — ADJUSTED |
|--------------------|----------------|----------------------------|----------------|----------------|---|-----------|--|
| | | nt Dioxin C justed Mean | | | s for Log ₂ xin + 1) | | |
| Model ^c | Low | Medium | High | \mathbb{R}^2 | Adj. Slope (Std. Error) ^d | p-Value | Covariate Remarks |
| 4 | 34.67 (287) | 34.31 (241) | 40.12 (246) | 0.272 | 0.0453 (0.0228) | 0.048 | AGE (p<0.001) PERS (p=0.122) BFAT (p<0.001) FAST (p=0.108) OCC*FAMDIAB (p=0.010) |
| 5 | 34.41 (288) | 35.33 (245) | 41.66 (241) | 0.277 | 0.0568 (0.0194) | 0.003 | AGE (p<0.001) PERS (p=0.120) BFAT (p<0.001) FAST (p=0.120) OCC*FAMDIAB (p=0.010) |
| 6 ^f | 36.41 (287) | 35.63 (245) | 39.18 (241) | 0.312 | 0.0282 (0.0201) | 0.160 | AGE (p<0.001) PERS (p=0.044) BFAT (p<0.001) FAST (p=0.123) OCC*FAMDIAB (p=0.010) |

^a Transformed from natural logarithm scale.

Note: Model 4: Low = \leq 8.1 ppt; Medium = >8.1-20.5 ppt; High = >20.5 ppt. Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

^b Adjusted for fasting status.

^c Model 4: Log₂ (lipid-adjusted current dioxin + 1).

Model 5: Log_2 (whole-weight current dioxin + 1).

Model 6: Log_2 (whole-weight current dioxin + 1), adjusted for log_2 total lipids.

^d Slope and standard error based on natural logarithm of serum insulin versus log₂ (current dioxin + 1).

e Adjusted for log₂ total lipids.

f Adjusted for log2 total lipids in addition to covariates specified under "Covariate Remarks" column.

Table A-2-6.
Interaction Table for Serum Insulin (mIU/ml) (Nondiabetics) (Continuous)

| - | a) MODEL 1: RANCH HANDS VS. COMPARISONS — ADJUSTED (Group-by-Body Fat: Table A-2-5) | | | | | | | | |
|-------------------------|--|--------------------------|------------|-------------------------------|--|----------------------|--|--|--|
| Stratum | Occupational Category | Group | n | Adjusted Mean ^a | Difference of Adjusted Means (95% C.I.) ^b | p-Value ^c | | | |
| Obese: >25% | All | Ranch Hand Comparison | 175 243 | 117.03 99.71 | 17.32 | 0.043 | | | |
| Lean or Normal: ≤25% | All | Ranch Hand Comparison | 619 838 | 55.96 59.15 | -3.19 | 0.189 | | | |
| Obese: >25% | Officer | Ranch Hand Comparison | 59 89 | 135.02 105.54 | 29.48 | 0.066 | | | |
| | Enlisted Flyer | Ranch Hand Comparison | 28 37 | 105.19 88.92 | 16.27 | 0.400 | | | |
| | Enlisted Groundcrew | Ranch Hand Comparison | 88 117 | 115.32 104.69 | 10.63 | 0.390 | | | |
| Lean or Normal: ≤25% | Officer | Ranch Hand Comparison | 247 352 | 63.64 62.98 | 0.67 | 0.874 | | | |
| | Enlisted Flyer | Ranch Hand Comparison | 106 126 | 43.22 54.03 | -10.82 | 0.033 | | | |
| | Enlisted Groundcrew | Ranch Hand Comparison | 266 360 | 58.34 61.58 | -3.24 | 0.400 | | | |

Table A-2-6. (Continued) Interaction Table for Serum Insulin (mIU/ml) (Nondiabetics) (Continuous)

| b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Age: Table A-2-5) | | | | | | | |
|---|------------------|-----|-------------------------------|---|----------------------|--|--|
| Stratum | Dioxin Category | n | Adjusted Mean ² | Difference of Adjusted Mean vs. Comparisons (95% C.I.) ^b | p-Value ^c | | |
| Born ≥1942 | Comparison | 467 | 47.57 | | | | |
| | Background RH | 133 | 42.00 | -5.57 | 0.099 | | |
| | Low RH | 80 | 45.54 | -2.03 | 0.636 | | |
| | High RH | 136 | 49.83 | 2.26 | 0.535 | | |
| | Low plus High RH | 216 | 48.20 | 0.63 | 0.834 | | |
| Born <1942 | Comparison | 547 | 64.30 | | | | |
| | Background RH | 221 | 64.36 | 0.06 | 0.989 | | |
| | Low RH | 124 | 63.31 | -0.99 | 0.837 | | |
| | High RH | 80 | 71.96 | 7.66 | 0.227 | | |
| • | Low plus High RH | 204 | 66.57 | 2.27 | 0.583 | | |

^a Transformed from natural logarithm scale.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Difference of means after transformation to original scale; confidence interval on difference of means not presented because analysis was performed on natural logarithm scale.

^c P-value is based on difference of means on natural logarithm scale.

Table A-2-7. Analysis of Serum Insulin (mIU/ml) (Nondiabetics) (Continuous) Occupation and Body Fat Removed from Final Model

| a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED | | | | | | | | |
|---|-----|----------------------------|---|----------------------------|---------|----------------------|--|--|
| Initial Dioxin Category Summary Statistics | | | Analysis Results for Log ₂ (Initial Dioxin) ^b | | | | | |
| Initial Dioxin | n | Adj. Mean ^{ab} | R ² | Adj. Slope (Std. Error) | p-Value | Covariate Remarks | | |
| Low | 143 | 69.02 | 0.154 | 0.0969 (0.0327) | 0.003 | AGE (p<0.001) | | |
| Medium | 145 | 74.34 | | | | | | |
| High | 143 | 86.93 | | | | | | |

^a Transformed from natural logarithm scale.

Note: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt.

^b Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

^c Slope and standard error based on natural logarithm of serum insulin versus log₂ (initial dioxin).

Table A-2-7. (Continued) Analysis of Serum Insulin (mIU/ml) (Nondiabetics) (Continuous)

Occupation and Body Fat Removed from Final Model

| b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED | | | | | | | | |
|---|-------|----------------------------|---|----------------------|----------------------------------|--|--|--|
| Dioxin Category | n | Adj. Mean ^{ab} | Difference of Adj. Mean vs. Comparisons (95% C.I.) ^c | p-Value ^d | Covariate Remarks | | | |
| Comparison | 1,014 | 66.71** | | | DXCAT*AGE (p=0.037) | | | |
| | | | | 0.400 | RACE (p=0.833) FAST (p=0.869) | | | |
| Background RH | 354 | 61.62** | -5.09 ** | 0.103** | PERS*FAMDIAB (p=0.107) | | | |
| Low RH | 204 | 66.98** | 0.27 ** | 0.946** | 1 EKS 1 MADE (P 0.107) | | | |
| High RH | 216 | 76.42** | 9.71 ** | 0.022** | | | | |
| Low plus High RH | 420 | 71.68** | 4.97 ** | 0.115** | | | | |

^a Transformed from natural logarithm scale.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

^c Difference of adjusted means after transformation to original scale; confidence interval on difference of adjusted means not presented because analysis was performed on natural logarithm scale.

^d P-value is based on difference of means on natural logarithm scale.

^{**} Categorized dioxin-by-covariate interaction (0.01 < p ≤ 0.05); adjusted mean, difference of adjusted means, confidence interval, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table A-2-8 for further analysis of this interaction.

Table A-2-7. (Continued) Analysis of Serum Insulin (mIU/ml) (Nondiabetics) (Continuous)

Occupation and Body Fat Removed from Final Model

| c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED | | | | | | | | |
|--|---|----------------|----------------|--|---|---------|--|--|
| | Current Dioxin Category Adjusted Mean*/(n) | | | Analysis Results for Log ₂ (Current Dioxin + 1) | | | | |
| Model ^b | Low | Medium | High | R ² | Adj. Slope (Std. Error) ^c | p-Value | Covariate Remarks | |
| 4 | 34.57 (287) | 41.39 (241) | 54.38 (246) | 0.095 | 0.1485 (0.0215) | <0.001 | AGE (p<0.001) FAMDIAB (p=0.489) PERS (p=0.389) FAST (p=0.249) | |
| 5 | 34.26 (288) | 41.22 (245) | 56.41 (241) | 0.107 | 0.1402 (0.0183) | <0.001 | AGE (p<0.001) FAMDIAB (p=0.526) PERS (p=0.352) FAST (p=0.256) | |
| 6 ^d | 36.18 (287) | 42.65 (245) | 53.62 (241) | 0.126 | 0.1158 (0.0192) | <0.001 | AGE (p<0.001) FAMDIAB (p=0.576) PERS (p=0.201) FAST (p=0.263) | |

^a Transformed from natural logarithm scale.

Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt. Note: Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

^b Model 4: Log₂ (lipid-adjusted current dioxin + 1).

Model 5: Log_2 (whole-weight current dioxin + 1). Model 6: Log_2 (whole-weight current dioxin + 1), adjusted for log_2 total lipids.

^c Slope and standard error based on natural logarithm of serum insulin versus log₂ (current dioxin +1).

^d Adjusted for log₂ total lipids in addition to covariates specified under "Covariate Remarks" column.

Table A-2-8.
Interaction Table for Serum Insulin (mIU/ml) (Nondiabetics)
(Continuous)
Occupation and Body Fat Removed from Final Model

a) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Age: Table A-2-7)

| tratum Dioxin Category | | n | Adjusted Mean ^a | Difference of Adjusted Mean vs. Comparisons (95% C.I.) ^b | p-Value ^c |
|------------------------|------------------|-----|-------------------------------|---|----------------------|
| Born ≥ 1942 | Comparison | 467 | 57.54 | | |
| | Background RH | 133 | 48.26 | -9.28 | 0.023 |
| | Low RH | 80 | 57.00 | -0.54 | 0.921 |
| | High RH | 136 | 62.35 | 4.81 | 0.294 |
| | Low plus High RH | 216 | 60.31 | 2.77 | 0.465 |
| Born < 1942 | Comparison | 547 | 70.50 | | |
| | Background RH | 221 | 69.28 | -1.22 | 0.781 |
| | Low RH | 124 | 71.71 | 1.21 | 0.826 |
| | High RH | 80 | 85.08 | 14.58 | 0.045 |
| | Low plus High RH | 204 | 76.68 | 6.18 | 0.192 |

^a Transformed from natural logarithm scale.

Note: RH = Ranch Hand.

Model 3: Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Difference of means after transformation to original scale; confidence interval on difference of means not presented because analysis was performed on natural logarithm scale.

^c P-value is based on difference of means on natural logarithm scale.

APPENDIX B

1992 Interval Questionnaire

Project No. 4563

AIR FORCE HEALTH STUDY

Third Followup Examinations 1992-1993

Study Subject Health Interval Questionnaire

> O.M.B. NUMBER 07010095 Approval Expires May 1988

AIR FORCE HEALTH STUDY

Third Followup Examinations 1992-1993

Study Subject Health Interval Questionnaire

OTHER MATERIALS REQUIRED FOR THIS INTERVIEW ARE:

- PARTICIPANT INFORMATION SHEET
- CHILDREN'S RECORD FORM
- SUPPLEMENTARY CHILDREN'S RECORD FORM
- PRIVACY ACT STATEMENT
- INTERVAL SUPPLEMENTAL RECORDING BOOK
- · RESPONDENT HAND CARDS A-Z, AA -- FF
- AFSC CODES LIST
- SELF-ADMINISTERED FORM 1
- SELF-ADMINISTERED FORM 2
- MEDICAL AUTHORIZATION FORMS
- HEALTH CARE PROVIDER FORMS
- DIETARY SELF-ADMINISTERED FORM
- CALENDAR

AIR FORCE HEALTH STUDY

Third Followup Examinations 1992-1993

Health Interval Questionnaire

Table of Contents

| Section A: | Introduction and Background | . A- 1 |
|-------------|--|---------------|
| Section B: | Education | . B-1 |
| Section C: | Employment (Non-Military) | . C-1 |
| Section D: | Military Experience | . D-1 |
| Section E: | Marital and Fertility History | . E-1 |
| Section F: | Child and Family Health | . F-1 |
| Section G: | Health | . G-1 |
| Section H: | Health Habits | . H-1 |
| Section I: | Recreation, Leisure, and Physical Activities | . -1 |
| Section J: | Toxic Substances | . J-1 |
| Section K: | Income | . K-1 |
| INTERVIEWER | REMARKS | . IR-1 |

| TIME BEGAN | : AM/PM |
|------------|-----------|
| | 10-13/ |

SECTION A: INTRODUCTION AND BACKGROUND

FOR THIS SECTION YOU WILL NEED:

- PARTICIPANT INFORMATION SHEET
- · HAND CARD A

Before I begin the interview, let me make sure that I have your correct name and rank. Is your name (READ NAME FROM INFORMATION SHEET) and is your rank (READ RANK FROM SHEET)?

IF INCORRECT, RE-ASK, CORRECT ON SHEET AND CONTINUE. IF YOU HAVE THE WRONG PERSON, END INTERVIEW AND TALK TO SUPERVISOR.

This part of the physical examination schedule will be an interview about your health and the health of your family. There will be some questions about your education, non-military employment, military experience, and health habits.

SAY TO PARTICIPANTS WHO PARTICIPATED IN PREVIOUS ROUNDS OF THE SURVEY: According to my records, you participated during the previous rounds of this survey. This time the interview will be comparable to the last one with a few additional questions.

The interview should last about two hours.

At various points during the interview, we will use the term "biological" to describe family relationships. For example, we may ask about your "biological" children. When using this term, we are referring to people who are related to you by blood. We do not mean your step-children or step-parents or people related to you through adoption.

You may refuse to answer any question you choose. However, we and the Air Force ask that you answer as many of the questions as you can, so the results will accurately and fully tell your story. We also need as accurate a picture as possible. So when we ask you about the dates of events in your life, please try to think carefully and remember as much as you possibly can.

HAVE PARTICIPANT FILL OUT PRIVACY ACT STATEMENT.

IF R IS NEW TO THE STUDY:

(HE JUST COMPLETED THE BASELINE IN LA JOLLA THIS WEEK), HIS DATE OF LAST INTERVIEW IS DECEMBER 31, 1982. USE DECEMBER 31, 1982 AS THE REFERENCE DATE WHILE ADMINISTERING THE HEALTH INTERVAL QUESTIONNAIRE. IF R IS NEW TO STUDY, SKIP TO QUESTION 4A, ON PAGE A-3.

| 1. | First I have a few background questions to ask you. My records indicate that your date of birth is (READ DATE OF BIRTH FROM ITEM 1, INFORMATION SHEET). Is that correct? |
|------|--|
| | YES (CONTINUE) 1 14/ |
| | NO (ASK DOB, CORRECT ITEM 1, INFORMATION SHEET, GO TO Q.2) 2 |
| 2. | My records indicate that you were previously interviewed in (READ DATE OF LAST INTERVIEW FROM INFORMATION SHEET). Is that correct? |
| | YES (SKIP TO QUESTION 3) |
| | NO |
| 2A. | IF R CANNOT REMEMBER DATE OF LAST INTERVIEW, USE THE FOLLOWING PROBES. Were you here at Scripps five years ago? |
| | YES (ASK Q.2A1) 1 |
| | NO |
| 2A1. | Was it in 1988 or 1987? |
| | YES (RECORD YEAR AND GO TO Q.2C) 1 |
| | NO |
| 2B. | Was it in 1986, 1985, 1982, OR 1981? (RECORD OR CORRECT INFORMATION SHEET) |
| 2C. | What month did the interview take place? (RECORD OR CORRECT INFORMATION SHEET) |
| 2D. | IF R CANNOT REMEMBER MONTH, USE THE FOLLOWING PROBE: |
| | Was it in the Spring, Summer, Fall or Winter? |
| | IF SPRING, CONVERT TO MONTH OF MARCH ON INFORMATION SHEET |
| | IF SUMMER, CONVERT TO MONTH OF JUNE ON INFORMATION SHEET |
| | IF FALL, CONVERT TO SEPTEMBER ON INFORMATION SHEET |
| | IF WINTER, CONVERT TO DECEMBER ON INFORMATION SHEET |
| 3. | IF R WAS INTERVIEWED IN 88, 87, 86 OR 85, SKIP TO SECTION B: EDUCATION, PAGE B-1. |

| 4A. RESPONDENT | 4B. MOTHER | 4C. FATHER |
|--|--|--|
| SHOW PARTICIPANT HAND CARD A. Please read Card A. To which of the following racial or ethnic groups do you belong? (CODE ALL THAT APPLY) (PROBE: What others?) | CONTINUE WITH HAND CARD A. To which of the following racial or ethnic groups does your biological mother belong? (CODE ALL THAT APPLY) (PROBE: What others?) | CONTINUE WITH HAND CARD A. To which of the following racial or ethnic groups does your blological father belong? (CODE ALL THAT APPLY) (PROBE: What others?) |
| ENGLISH/WELSH 01 15-16/ | ENGLISH/WELSH 01 51-52/ | ENGLISH/WELSH 01 16-17/ |
| SCOTTISH 02 17-18/ | SCOTTISH 02 53-54 | SCOTTISH 02 18-19/ |
| GERMAN 03 19-20/ | GERMAN 03 55-56/ | GERMAN 03 20-21/ |
| IRISH 04 21-22/ | IRISH 04 57-58/ | IRISH 04 22-23/ |
| SCANDINAVIAN 05 23-24/ | SCANDINAVIAN 05 59-60/ | SCANDINAVIAN 05 24-25/ |
| POLISH 06 25-26/ | POLISH 06 61-62/ | POLISH 06 26-27/ |
| RUSSIAN 07 27-28/ | RUSSIAN 07 63-64/ | RUSSIAN 07 28-29/ |
| OTHER SLAVIC 08 29-30/ | OTHER SLAVIC 08 65-66/ | OTHER SLAVIC 08 30-31/ |
| JEWISH 09 31-32/ | JEWISH 09 67-68/ | JEWISH 09 32-33/ |
| FRENCH 10 33-34/ | FRENCH 10 69-70/ | FRENCH 10 34-35/ |
| ITALIAN 11 35-36/ | ITALIAN | ITALIAN |
| SPANISH 12 37-38/ | SPANISH 12 73-74/ | SPANISH 12 38-39/ |
| MEXICAN 13 39-40/ | MEXICAN 13 75-76/ | MEXICAN 13 40-41/ |
| GREEK 14 41-42/ | GREEK 14 77-78/ | GREEK 14 42-43/ |
| AMERICAN INDIAN 15 43-44/ | AMERICAN INDIAN 15 79-80/ | AMERICAN INDIAN 15 44-45/ |
| BEGIN DECK 02 | | |
| ASIAN 16 45-46/ | ASIAN 16 10-11/ | ASIAN 16 46-47/ |
| AFRICAN (OR BLACK AMERICAN) 17 47-48/ | AFRICAN (OR BLACK AMERICAN) 17 12-13/ | AFRICAN (OR BLACK AMERICAN) 17 48-49/ |
| OTHER (SPECIFY) | OTHER (SPECIFY) | OTHER (SPECIFY) |
| 18 49-50/ | 18 14-15/ | 18 50-51/ |

SECTION B: EDUCATION

FOR THIS SECTION YOU WILL NEED:

- PARTICIPANT INFORMATION SHEET
- HAND CARD B

| 1A. | My records show that when you were last interview DEGREE OBTAINED FROM ITEM 2 OF INFORMA | ved you had ATION SHE | d received a (READ L EET). Is that correct? | AST |
|-----|---|--------------------------|---|--------------------------------------|
| | YES | • • • • • • • • | 1 | |
| | NO (CORRECT INFORMATION AND GO TO Q.1B) | SHEET | 2 | |
| | MISSING (ASK AND RECORD ON IN | FORMATIC | ON SHEET) 3 | |
| 1B. | SHOW PARTICIPANT HAND CARD B. Have you certificates, diplomas or degrees since (DATE OF L | received a | ny (additional) regular RVIEW)? | school |
| | YES (ASK Q.1C AND Q.1D) | | 1 | |
| | NO (SKIP TO Q.2, NEXT PAGE) | | 2 | 52 |
| 1C. | What certificates, diplomas, and/or degrees did you get? (CODE ALL THAT APPLY) | | 1D. INTERVIEWER: EACH DEGREE IN Q.1C, ASK Q what year did yo (DEGREE IN 1C RECORD YEAR | CODED .1D. In u receive .)? |
| | HIGH SCHOOL DIPLOMA | 53-54/ | 19[] YEAR | 55-56/ |
| | HIGH SCHOOL EQUIVALENCY DIPLOMA 02 | 57-58/ | 19 YEAR | 59-60/ |
| | ASSOCIATE OF ARTS (A.A.) | 61-62/ | 19 YEAR | 63-64/ |
| | BACHELOR OF SCIENCE (B.S.) 04 | 65-66/ | 19[] YEAR | 67-68/ |
| | MASTERS (M.A. OR M.S.) | 69-70/ | 19 | 71-72/ |
| | DOCTORATE (Ph.D., M.D., Ed.D., Sc.D.) 06 OTHERS (SPECIFY) | 73-74/ | YEAR 19 <u> </u> YEAR | 75-76/ |
| | | | | |
| | 07 | 77-78/ | 19 | 79-80/ |
| | NO CERTIFICATE, DIPLOMA, OR DEGREE (VOLUNTEERED) | BEGIN 10-11/ | DECK 03 | |

| 2. | Since (DATE OF LAST INTERVIEW) have you participated in any civilian job trail (other than the formal schooling that we discussed), that prepared you for a major occupation? | ning programs r change in your |
|-----|---|-----------------------------------|
| | YES (ASK Q.2A) | 12/ |
| | NO (SKIP TO Q.3, PAGE B-5) 2 | |
| FIR | ST PROGRAM: CIVILIAN JOB TRAINING | |
| 2A. | For what kind of work was your first civilian training program preparing you? PROBE: What would your main duties be if you went into this line of work? | |
| | | - |
| | | _ |
| | | _ |
| | | 13-15/ |
| 2B. | In what month and year did you start this training? | |
| | MONTH YEAR | 16-19/ |
| 2C. | In what month and year did you complete this training? | |
| | MONTH YEAR | 20-23/ |
| | CURRENTLY IN TRAINING 1 | |
| 2D. | Have you participated in any other civilian job training program that prepared you change in your occupation? | for a major |
| | YES (ASK Q.2E, NEXT PAGE) 1 | 24/ |
| | NO (SKIP TO Q.3, PAGE B-5) 2 | |

| SECOND | PROGRAM: | CIVILIAN | JOB | TRAINING |
|--------|----------|----------|------------|----------|
|--------|----------|----------|------------|----------|

| F. In what month and year did you start this training? | |
|---|---------|
| F. In what month and year did you start this training? | |
| F. In what month and year did you start this training? | |
| F. In what month and year did you start this training? | |
| MONTH YEAR 3. In what month and year did you complete this training? MONTH YEAR | 25-27/ |
| 6. In what month and year did you complete this training? | |
| L MONTH YEAR | 28-31/ |
| MONTH YEAR CURRENTLY IN TRAINING | |
| | 32-35/ |
| Have you participated in any other civilian job training program that prepared you fo change in your occupation? | r a maj |
| YES (ASK Q.2I, NEXT PAGE) 1 | 36/ |

| TIUDO | PROGRAM: | CIVIL IAM | IAB | TRAINING |
|--------------|----------|-----------|-----|----------|
| THIRD | PROGRAM: | CIVILIAN | JUD | UNINIANI |

| | | |
|-----|---|--------------|
| | | |
| | | - |
| | | - |
| | | 37-39/ |
| 2J. | In what month and year did you start this training? | |
| | MONTH YEAR | 40-43/ |
| 2K. | In what month and year did you complete this training? | |
| | MONTH YEAR | 44-47/ |
| | CURRENTLY IN TRAINING 1 | |
| 2L. | Have you participated in any other civilian job training program that prepared you change in your occupation? | for a majo |
| | YES (GO TO NEW QUEX) 1 | 48/ |
| | NO 2 | |

| 3. | Have you served in the military full-time on active duty since (DATE OF LAST INTERVIEW. IF NEW TO STUDY, USE DECEMBER 31, 1982). |
|----|--|
| | YES 1 49/ |
| 4. | NO (SKIP TO SECTION C, PAGE C-1) |
| | YES 1 50/ |
| 5. | NO |
| | NO (SKIP TO SECTION C, PAGE C-1) |

| FIRST PROGRAM (LEAST RECENT): | MILITARY TRAINING PROGRAM |
|-------------------------------|---------------------------|
|-------------------------------|---------------------------|

| 5A. | For what kind of work was your first military training program preparing you? PROBE: What would your main duties be if you went into this line of work? | |
|-------------|---|---------------|
| | | • |
| | | |
| | | |
| 5B | What is the AFSC for that job? | |
| 36 . | What is the Ai 30 lor that job: | 52-56/ |
| 5C. | In what month and year did you start this training? | |
| | MONTH YEAR | 57-60/ |
| 5 D. | In what month and year did you complete this training? | |
| | MONTH YEAR | 61-64/ |
| | CURRENTLY IN TRAINING 1 | |
| 5E. | Have you participated in any other military job training program that prepared you change in your occupation? | ı for a major |
| | YES (ASK Q.5F, NEXT PAGE) | 65/ |
| | NO (SKIP TO SECTION C, PAGE C-1) | |

| SE | COND PROGRAM: MILITARY TRAINING PROGRAM | |
|-----|--|-------------|
| 5F. | For what kind of work was your second military training program preparing you? PROBE: What would your main duties be if you went into this line of work? | |
| | | |
| | | |
| | | |
| | | |
| 5G. | What is the AFSC for that job? | |
| | | 66-70/ |
| 5H. | In what month and year did you start this training? | |
| | MONTH YEAR | 71-74/ |
| 51. | In what month and year did you complete this training? | |
| | MONTH YEAR | 75-78/ |
| | CURRENTLY IN TRAINING 1 | |
| 5J. | Have you participated in any other military job training program that prepared you change in your occupation? | for a major |
| | YES (ASK Q.5K, NEXT PAGE) | 79 / |

NO ... (SKIP TO SECTION C, PAGE C-1) 2

| THI | RD PROGRAM (MOST RECENT): MILITARY TRAINING PROGRAM | |
|-----|---|---------------|
| 5K. | For what kind of work was your third military training program preparing you? PROBE: What would your main duties be if you went into this line of work? | ÷ |
| | - | |
| | | |
| | | |
| | | |
| 5L. | What is the AFSC for that job? BEGIN | N DECK 04 |
| | | 10-14/ |
| 5M. | In what month and year did you start this training? | |
| | MONTH YEAR | 15-18/ |
| 5N. | In what month and year did you complete this training? | |
| | MONTH YEAR | 19-22/ |
| | CURRENTLY IN TRAINING 1 | |
| 50. | Have you participated in any other military job training program that prepared you change in your occupation? | ı for a major |
| | YES (GO TO NEW QUEX) 1 | 23/ |
| | NO (GO TO SECTION C, NEXT PAGE) 2 | 24-27/R |

SECTION C: EMPLOYMENT (NON-MILITARY) FOR THIS SECTION YOU WILL NEED:

- INTERVAL SUPPLEMENTAL RECORDING BOOK (LS.R.B.)
- HAND CARD C
- HAND CARD D
- HAND CARD E

CURRENT OR MOST RECENT JOB

1. Now I have some questions about working. Please tell me about any jobs you've had that lasted for 3 months or longer since (DATE OF LAST INTERVIEW). Include current or newly found jobs. If you had more than one job at the same time, please tell me about each job separately. Count changes of jobs for the same employer as separate jobs. Do not include jobs in the military. Let's start with the most recent regular job you've had and work back in time to (DATE OF LAST INTERVIEW).

In what month and year did you start your current job, or if you don't have a current job, your most recent job that lasted 3 months or longer? 28-31/ NO CIVILIAN JOBS: (SKIP TO Q.IS.1 IN LS.R.B. ON PAGE 2) 32/ ONLY MILITARY JOBS. . . 1A. What (is/was) the name of your employer? 33-57/ 1B. (Is/Was) this a full-time or part-time job? 58/ 1C. What kind of business (is/was) that--what (do/did) they make or do there? RECORD VERBATIM 59-61/ 1D. What (do/did) you actually do on the job--what (are/were) some of your main duties? RECORD VERBATIM 62-64/

CURRENT OR MOST RECENT JOB (Continued)

| 1E. | SHOW PARTICIPANT HAND CARD C. Please loc describes the kind of industry you (work/worked) in WRITE IN NUMBER In what month and year did this job end or is this you | ? :R: | 65-66/ |
|-----|--|---|--------|
| | L L I MONTH | YEAR | 67-70/ |
| | CURRENT JOB (SKIP TO (| Ω.2 BELOW) 1 | 71/ |
| 1G. | What was the main reason you stopped working or (RECORD VERBATIM) | ı your job? | 72-73/ |
| 2 | SHOW PARTICIPANT HAND CARD D. While working at (EMPLOYER) (do/did) you come in contact with any of the substances on this card? By contact I mean that you inhaled, tasted, had skin contact with these fibers and chemicals or were exposed to ionizing or nuclear radiation. | 2A. FOR EACH SUBSTANCE CODED IN Q Q.2A. | |

| | BEGIN | DEC | K 05 |
|--|--------------|-----|--------|
| lonizing or nuclear radiation . | • • • • • • | 02 | 10-11/ |
| Industrial chemicals | | 03 | 14-15/ |
| Insecticides or pesticides | | 04 | 18-19/ |
| Degreasing chemicals | | 05 | 22-23/ |
| Defoliants or herbicides | | 06 | 26-27/ |
| NONE OF THE ABOVE (SKIP TO Q.5, PAGE C-3) | | 07 | 30-31/ |

Asbestos 01 74-75/

CODE ALL THAT APPLY

In general, how many days a month did you come in contact with (SUBSTANCE)?

DAYS Less than once a month . . 95 76-77/

DAYS Less than once a month . . 95 12-13/

DAYS Less than once a month . . 95 16-17/
DAYS Less than once a month . . 95 20-21/

DAYS Less than once a month . . 95 24-25/

DAYS Less than once a month . . 95 28-29/

CURRENT OR MOST RECENT JOB (Continued)

| 3. | While you were on that job, how often (do/did) you wash to remove the (SUI gear would you say all of the time, some of the time, or never? | BSTANCE | S) or use protective |
|----|--|------------|----------------------|
| | ALL OF THE TIME | 1 | . 32/ |
| | SOME OF THE TIME | 2 | |
| | NEVER (SKIP TO Q.5) | 3 | |
| 4. | SHOW PARTICIPANT HAND CARD E. Which of the following (do/did) you CODE ALL THAT APPLY | use on tha | it job? |
| | Air filter | 01 | 33-34/ |
| | Goggles | 02 | 35-36/ |
| | Face shield | 03 | 37-38/ |
| | Special clothing | 04 | 39-40/ |
| | Washing facilities | 05 | 41-42/ |
| | Self-contained or supplied air breathing apparatus | 06 | 43-44/ |
| | NONE | 07 | 45-46/ |
| | Did you have another job before the job with (EMPLOYER NAME IN Q.1A) s INTERVIEW) that lasted 3 months or longer? | since (DAT | E OF LAST |
| | YES | 1 | 47/ |
| | NO (SKIP TO Q.IS.1 IN LS.R.B. ON PAGE 2) | 2 ` | |

| SEC | OND MOST RECENT JOB | · |
|-------|--|----------------|
| 6. In | what month and year did you start that job? | |
| | MONTH YEAR | 48-51/ |
| 6A. | What was the name of your employer? | |
| | | 52-76/ |
| | | |
| 6B. | I have to ask you the same questions for this employer. Was this a full-time or | part-time job? |
| | FULL-TIME | 77/ |
| | PART-TIME | BEGIN DECK 06 |
| 6C. | What kind of business was thatwhat did they make or do there? RECORD VERBATIM | BEGIN DEON 00 |
| | | 10-12/ |
| | | |
| 6D. | What did you actually do on the jobwhat were some of your main duties? RECORD VERBATIM | |
| | | 13-15/ |
| | | |

| 6E. | SHOW PARTICIPANT HAND CARD C. Please id describes the kind of industry you worked in? | ook at this card and | tell me which number best | |
|-----|---|----------------------|---|--------|
| | WRITE IN NUMBER: | | 16-17/ | |
| 6F. | In what month and year did this job end? | | | |
| | L_L_I MONTH | YEAR | 18-21/ | ` |
| | CURRENT JOB (SKIP TO Q.7, BELOW) | 1 | | |
| 6G. | What was the main reason you stopped working of RECORD VERBATIM | on your job? | | |
| | | | 22-23/ | |
| | | | | |
| 7. | SHOW PARTICIPANT HAND CARD D. While working at (EMPLOYER NAMED IN Q.6A) did you come in contact with any of the substances on this card? By contact I mean that you inhaled, tasted, had skin contact with these fibers and chemicals or were exposed to ionizing or nuclear radiation. CODE ALL THAT APPLY | Q.7A. | I SUBSTANCE CODED IN Q.7 many days a month did you ∞ JBSTANCE)? | |
| Asl | bestos 01 24-25/ | DAYS | Less than once a month 95 | 26-27/ |
| ion | izing or nuclear radiation 02 28-29/ | DAYS | Less than once a month 95 | 30-31/ |
| Ind | lustrial chemicals 03 32-33/ | DAYS | Less than once a month 95 | 34-35/ |
| Ins | ecticides or pesticides 04 36-37/ | DAYS | Less than once a month 95 | 38-39/ |
| De | greasing chemicals 05 40-41/ | DD DAYS | Less than once a month 95 | 42-43/ |
| Def | foliants or herbicides 06 44-45/ | DD DAYS | Less than once a month 95 | 46-47/ |
| | ONE OF THE ABOVE SKIP TO Q.10, PAGE C-6) 07 48-49/ | • | | |

SECOND MOST RECENT JOB (Continued)

| 8. | While you were on that job, how often did you wash to remove the (SUBSTANCE would you say all of the time, some of the time, or never? | S) or use protective gear |
|-----|--|---------------------------|
| | ALL OF THE TIME 1 | 50/ |
| | SOME OF THE TIME | |
| | NEVER (SKIP TO Q.10) | |
| | SHOW PARTICIPANT HAND CARD E. Which of the following did you use on tha CODE ALL THAT APPLY | nt job? |
| | Air filter | 51-52/ |
| | Goggles | 53-54/ |
| | Face shield | 55-56/ |
| | Special clothing | 57-58/ |
| | Washing facilities | 59-60/ |
| | Self-contained or supplied air breathing apparatus | 61-62/ |
| | NONE 07 | 63-64/ |
| 10. | Did you have another job before the job with (EMPLOYER NAME IN Q.6A) sinc INTERVIEW)? | e (DATE OF LAST |
| | YES 1 | 65/ |
| | NO (SKIP TO Q.IS.1 IN LS.R.B. ON PAGE 2) 2 | |

| IRD | MOST RECENT JOB | |
|------------|--|---------------|
| . 1 | n what month and year did you start that job? | |
| | MONTH YEAR | 66-69/ |
| A. | What was the name of your employer? | BEGIN DECK 07 |
| | | 10-34/ |
| | | |
| 3. | Was this a full-time or part-time job? | |
| | FULL-TIME 1 | 35/ |
| | PART-TIME | |
|) . | What kind of business was thatwhat did they make or do there? RECORD VERBATIM | · |
| | · · · · · · · · · · · · · · · · · · · | 36-38/ |
|) . | What did you actually do on the jobwhat were some of your main duties? RECORD VERBATIM | |
| | | 39-41/ |
| | | |

| THIRD MO | ST RECEN | T JOB (| (Continued) |
|----------|----------|---------|-------------|
|----------|----------|---------|-------------|

| 11E. | SHOW PARTICIPANT HAND CARD C. Please describes the kind of industry you worked in? | look at this card and tell me which number best |
|-------|--|--|
| | WRITE IN NUMBE | R: 42-43/ |
| 11F. | In what month and year did this job end? | |
| | I MONTH | YEAR |
| | CURRENT JOB (SKIP TO Q.12, BELOW) | 1 44-47/ |
| 11G. | What was the main reason you stopped working of RECORD VERBATIM | on your job? |
| | | 48-49/ |
| | | · |
| 12. | SHOW PARTICIPANT HAND CARD D. While working at (EMPLOYER NAMED IN Q.11A) did you come in contact with any of the substances on this card? By contact I mean that you inhaled, tasted, had skin contact with these fibers and chemicals or were exposed to ionizing or nuclear radiation. CODE ALL THAT APPLY | 12A. FOR EACH SUBSTANCE CODED IN Q.12, ASI 12A. In general, how many days a month did you come in contact with (SUBSTANCE)? |
| Asb | estos 01 50-51/ | DAYS Less than once a month 95 52-5 |
| Ioniz | zing or nuclear radiation 02 54-55/ | DAYS Less than once a month 95 56-5 |
| Indu | strial chemicals 03 58-59/ | DAYS Less than once a month 95 60-6 |
| Inse | cticides or pesticides 04 62-63/ | DAYS Less than once a month 95 64-6 |
| Deg | reasing chemicals 05 66-67/ | DAYS Less than once a month 95 68-6 |
| Defo | oliants or herbicides 06 70-71/ | DAYS Less than once a month 95 72-7 |
| | NE OF THE ABOVE KIP TO Q.15, PAGE C-9) 07 74-75/ | · · |

Field Version 1.1

THIRD MOST RECENT JOB (Continued)

| 13 | . While you were on that job, how often did you wash to remove the (SUBSTAN gear - would you say all of the time, some of the time, or never? | ICES) or use protective |
|-----|---|-------------------------|
| | ALL OF THE TIME | 76/ |
| | SOME OF THE TIME 2 | |
| | NEVER | |
| 14 | . SHOW PARTICIPANT HAND CARD E. Which of the following did you use on CODE ALL THAT APPLY | that job? |
| | Air filter | BEGIN DECK 08 10-11/ |
| | Goggles 02 | 12-13/ |
| | Face shield | 14-15/ |
| | Special clothing | 16-17/ |
| | Washing facilities | 18-19/ |
| | Self-contained or supplied air breathing apparatus | 20-21/ |
| | NONE | 22-23/ |
| 15. | Did you have another job before the job with (EMPLOYER NAME IN Q.11A) sir INTERVIEW)? | nce (DATE OF LAST |
| | YES 1 | 24/ |
| | NO (SKIP TO Q.IS.1 IN I.S.R.B. ON PAGE 2) 2 | |

| пеаш | Interval Questionnane | |
|--------|--|--------|
| FOUR | TH MOST RECENT JOB | |
| 16. lı | n what month and year did you start that job? | |
| | MONTH YEAR | 25-28/ |
| 16A. | What was the name of your employer? | |
| | | 29-53/ |
| | | |
| | | |
| 16B. | Was this a full-time or part-time job? | |
| | FULL-TIME 1 | 54/ |
| | PART-TIME | |
| 16C. | What kind of business was that—what did they make or do there? RECORD VERBATIM | |
| | | 55-57/ |
| 16D. | What did you actually do on the jobwhat were some of your main duties? RECORD VERBATIM | |
| | | 58-60/ |
| | | |

FOURTH MOST RECENT JOB (Continued)

| | • | |
|-------|--|--|
| 16E. | SHOW PARTICIPANT HAND CARD C. Please describes the kind of industry you worked in? WRITE IN NUMBER: | look at this card and tell me which number best |
| | | |
| 16F. | In what month and year did this job end? | |
| | LL_ MONTH | _ YEAR 63-66/ |
| | CURRENT JOB (SKIP TO Q.17, BELOW) |) 1 |
| ÷ | | |
| 16G. | What was the main reason you stopped working o RECORD VERBATIM | on your job? |
| | | 67-68/ |
| | | |
| 17. | SHOW PARTICIPANT HAND CARD D. While working at (EMPLOYER NAMED IN Q.16A) did you come in contact with any of the substances on this card? By contact I mean that you inhaled, tasted, had skin contact with these fibers and chemicals or were exposed to ionizing or nuclear radiation. CODE ALL THAT APPLY | 17A. FOR EACH SUBSTANCE CODED IN Q.17, ASK Q.17A. In general, how many days a month did you come in contact with (SUBSTANCE)? |
| Asbe | estos 01 69-70/ | DAYS Less than once a month 95 71-72/ |
| loniz | ing or nuclear radiation 02 73-74/ | DAYS Less than once a month 95 75-76/ |
| Indu | strial chemicals | DAYS Less than once a month 95 79-80/ |
| inse | BEGIN DECK 09 cticides or pesticides 04 10-11/ | DAYS Less than once a month 95 12-13/ |
| Degr | reasing chemicals 05 14-15/ | DAYS Less than once a month 95 16-17/ |
| Defo | liants or herbicides 06 18-19/ | DAYS Less than once a month 95 20-21/ |
| | IE OF THE ABOVE IP TO Q.20, PAGE C-12) 07 22-23/ | |

FOURTH MOST RECENT JOB (Continued)

| 18. | While you were on that job, how often did you wash to remove the (SUBSTANCES) of gear would you say all of the time, some of the time, or never? | r use protective |
|-----|--|------------------|
| , | ALL OF THE TIME 1 | 24/ |
| 5 | SOME OF THE TIME 2 | |
| ľ | NEVER (SKIP TO Q.20, BELOW) 3 | |
| 19. | SHOW PARTICIPANT HAND CARD E. Which of the following did you use on that job CODE ALL THAT APPLY | b? |
| 1 | Air filter | 25-26/ |
| (| Goggles | 27-28/ |
| | Face shield | 29-30/ |
| | Special clothing | 31-32/ |
| | Washing facilities | 33-34/ |
| | Self-contained or supplied air breathing apparatus | 35-36/ |
| | NONE | 37-38/ |
| 20. | Did you have another job before the job with (EMPLOYER NAME IN Q.16A) since (DA INTERVIEW)? | TE OF LAST |
| ` | YES (USE NEW QUEX) 1 | · 39/ |
| ľ | NO (SKIP TO Q.IS.1 IN LS.R.B. ON PAGE 2) 2 | |

| 21. | During the past six months, did illness or injury keep you from working, not counting work around the house? |) |
|-----|--|--------|
| | YES 1 | 40/ |
| | NO (SKIP TO SECTION D) 2 | |
| | RETIRED (SKIP TO SECTION D) 3 | |
| | UNEMPLOYED (SKIP TO SECTION D) 4 | |
| 22. | Altogether, how many days did illness or injury keep you from working during the past six months? REFERS TO "WORKING DAYS" ONLY | |
| | ENTER NUMBER OF DAYS: | 41-43/ |
| 23 | . What illnesses or injuries caused you to miss work? (PROBE: What others?) | |
| | | 44/ |
| | | |

SECTION D: MILITARY EXPERIENCE FOR THIS SECTION YOU WILL NEED:

- PARTICIPANT INFORMATION SHEET
- HAND CARD D
- · HAND CARD E
- HAND CARD F

| 1. | WAS R INTERVIEWED IN 1985, 1986 OR 1987, 1988? SEE INFORMATION SHEET. |
|-----|---|
| | YES (SKIP TO Q.3) 1 |
| | NO (GO TO Q.2) 2 |
| 2. | SHOW PARTICIPANT HAND CARD F. Which of the following statements best describes your assignment during the Vietnam War? Were you (READ CHOICES)? CODE ONE. |
| | A crew member in Vietnam who was on flying status |
| | Not a crew member, but flew one or more missions in Vietnam 2 |
| | A crew member, but did not log flying time in Vietnam |
| | Not a crew member |
| 3. | INTERVIEWER: HAS R SERVED IN MILITARY ON ACTIVE DUTY SINCE DATE OF LAST INTERVIEW? INTERVIEWER CHECK: GO TO SECTION B, PAGE B-5. IS QUESTION 3 CODED "YES"? |
| | YES (GO TO Q.3A) |
| | NO (SKIP TO SECTION E, PAGE E-1) 2 |
| 3A. | I am going to ask you about some of your experience in the military since (READ DATE OF LAST INTERVIEW). |
| 3B. | According to your records, your last branch of service was (BRANCH FROM ITEM 3)? Is that correct? |
| | YES 1 |
| | NO (CORRECT INFORMATION SHEET) 2 |
| | MISSING(ASK LAST BRANCH OF SERVICE, RECORD AT ITEM 3 ON INFORMATION SHEET) |

| 4. | Since (DATE OF LAST INTERVIEW) have you retired, been discharged or separated from the (BRANCH OF SERVICE FROM ITEM 3 ON SHEET)? | | |
|------------|--|---|--------------------------|
| | (IF BRANCH MISSING, ASK AND ADD TO INFO SHEET.) | | |
| | 71 - | YES (ASK Q.4A THROUGH Q.4C) 1 | 47/ |
| | | NO (SKIP TO Q.5, PAGE) 2 | |
| 4A. | Were you retired, di | scharged or separated? | |
| | | RETIRED | 48/ |
| | | DISCHARGED/SEPARATED | |
| 4B. | In what month and SERVICE FROM IT | year were you (retired/discharged/separated) from the (READ BREM 3)? | IANCH OF |
| | | MONTH YEAR | 49-52/ |
| 4C. | Following your (retir forces? | rement/separation/discharge) in (DATE IN Q.4B.), did you re-enter | the armed |
| | | YES | 53/ |
| | | NO 2 | |
| 5 . | stationed in since (E | ou the names of all the countries, including the United States, you DATE OF LAST INTERVIEW). I will also ask you some questions while in these countries. | have been about your |
| | When last interviewed and your assignments that correct? | ed you were stationed in (COUNTRY FROM INFORMATION SHEE It began in (DATE OF ASSIGNMENT FROM INFORMATION SHEE | T ITEM 3), T ITEM 3). |
| | YES (AS | K Q.5B THROUGH Q.5K) | 54/ |
| | NO (CO THE | PRRECT INFORMATION SHEET, EN ASK Q.5B THROUGH Q.5K) | |
| | MISSING . (AS | K COUNTRY AND DATE OF ASSIGNMENT, O TO INFO SHEET AND ASK Q.5B THROUGH Q.5K) 3 | |
| | NO ACTIVE DUT | Y AT LAST (ASK Q.5A THROUGH Q.5K) | |

| FIRST COUNTRY | SECOND COUNTRY | THIRD COUNTRY |
|---|---|--|
| 5A. Since (READ DATE OF LAST INTERVIEW), in what country were you next stationed while on active duty? Please include temporary duties of greater than 90 days. | 5L. Since (READ DATE OF LAST INTERVIEW), in what other country were you next stationed while on active duty? Please include temporary duties of greater than 90 days. | 5W. Since (READ DATE OF LAST INTERVIEW), in what other country were you next stationed while on active duty? Please include temporary duties of greater than 90 days. |
| 1ST COUNTRY 55-56/ | 1ST COUNTRY 10-11/ | 1ST COUNTRY 35-36/ |
| 5B. In what month and year did you begin and end active duty in (COUNTRY)? | 5M. In what month and year did you begin and end active duty in (COUNTRY)? | 5X. In what month and year did you begin and end active duty in (COUNTRY)? |
| BEGIN | BEGIN | BEGIN |
| MONTH YEAR 57-60/ | MONTH YEAR 12-15/ | _ _ MONTH YEAR 37-40/ |
| END MONTH YEAR 61-64/ CURRENT (NO END DATE) | END | END MONTH YEAR 41-44/ CURRENT (NO END DATE) 1 |
| 5C. What specific job assignments (do/did) you have in (COUNTRY) since (DATE OF LAST INTERVIEW)? Can you give me the Air Force Speciality Code? (PROBE: What others?) | 5N. What specific job assignments (do/did) you have in (COUNTRY) since (DATE OF LAST INTERVIEW)? Can you give me the Air Force Speciality Code? (PROBE: What others?) | (NO END DATE) 1 5Y. What specific job assignments (do/did) you have in (COUNTRY) since (DATE OF LAST INTERVIEW)? Can you give me the Air Force Speciality Code? (PROBE: What others?) |
| 1. | 1. 20-24/ | 1. <u> </u> 45-49/ |
| 2. | 2. 25-29/ | 2. <u> 5</u> 0-54/ |
| 3. <u> 75</u> -79/ | 3. 30-34/ | 3. 55-59/ |
| (GO TO Q5.D ON PAGE D-4) | (GO TO Q5.O ON PAGE D-4) | (GO TO Q.5Z ON PAGE D-4) |

| FIRST COUNTRY | SECOND COUNTRY | THIRD COUNTRY |
|--|--|---|
| 5D. (Do/Did) your duties in (COUNTRY) since (DATE OF LAST INTERVIEW) include flying? 60/ YES | 50. (Do/Did) your duties in (COUNTRY) since (DATE OF LAST INTERVIEW) include flying? 10/ YES | 5Z. (Do/Did) your duties in (COUNTRY) since (DATE OF LAST INTERVIEW) include flying? 30/ YES |
| NO(SKIP TO Q.5G ON PAGE D-5) 2 | NO . (SKIP TO Q.5R ON PAGE D-5) 2 | ON PAGE D-5) 2 |
| 5E. How many flight hours did you log while in (COUNTRY) since (DATE OF LAST INTERVIEW)? | 5P. How many flight hours did you log while in (COUNTRY) since (DATE OF LAST INTERVIEW)? | 5AA. How many flight hours did you log while in (COUNTRY) since (DATE OF LAST INTERVIEW)? |
| 61-64/ | 11-14/ | 31-34/ |
| Hours | Hours | Hours |
| 5F. What specific letter and numerical designation(s) did each aircraft have since (DATE OF LAST INTERVIEW)? | 5Q. What specific letter and numerical designation(s) did each aircraft have since (DATE OF LAST INTERVIEW)? | 5BB. What specific letter and numerical designation(s) did each aircraft have since (DATE OF LAST INTERVIEW)? |
| 1. 65-69/ | 1. <u> </u> | 1. |
| 2. 70-74/ | 2. 20-24/ | 2. 40-44/ |
| 3. <u> 75-79/</u> | 3. 25-29/ | 3. 45-49/ |
| (GO TO Q.5G ON PAGE D-5) | (GO TO Q.5R ON PAGE D-5) | (GO TO Q.5CC ON PAGE D-5) |

| FIRST COUNTRY | SECOND COUNTRY | THIRD COUNTRY |
|--|--|---|
| 5G. SHOW PARTICIPANT HAND CARD D. In your job assignments while stationed in (COUNTRY), (do/did) you come in contact with any of the substances on this card? By contact I mean that you inhaled, tasted, had skin contact with these fibers and chemicals, or were exposed to ionizing or nuclear radiation. CODE ALL THAT APPLY. | 5R. SHOW PARTICIPANT HAND CARD D. In your job assignments while stationed in (COUNTRY), (do/did) you come in contact with any of the substances on this card? By contact I mean that you inhaled, tasted, had skin contact with these fibers and chemicals, or were exposed to ionizing or nuclear radiation. CODE ALL THAT APPLY. | 5CC. SHOW PARTICIPANT HAND CARD D. In your job assignments while stationed in (COUNTRY), (do/did) you come in contact with any of the substances on this card? By contact I mean that you inhaled, tasted, had skin contact with these fibers and chemicals, or were exposed to ionizing or nuclear radiation. CODE ALL THAT APPLY. |
| Asbestos 01 50-51/ | Asbestos 01 64-65/ | Asbestos 01 10-11/ |
| lonizing or nuclear radiation 02 52-53/ | lonizing or nuclear radiation 02 66-67/ | lonizing or nuclear radiation 02 12-13/ |
| Industrial chemicals . 03 54-55/ | Industrial chemicals . 03 68-69/ | Industrial chemicals . 03 14-15/ |
| Insecticides or pesticides 04 56-57/ | Insecticides or pesticides 04 70-71/ | Insecticides or pesticides 04 16-17/ |
| Degreasing chemicals 05 58-59/ | Degreasing chemicals 05 72-73/ | Degreasing chemicals 05 18-19/ |
| Defoliants or herbicides 06 60-61/ | Defoliants or herbicides 06 74-75/ | Defoliants or herbicides 06 20-21/ |
| NONE OF THE ABOVE (SKIP TO SECOND COUNTRY Q.5K ON PAGE D-7) 07 62-63/ | NONE OF THE ABOVE (SKIP TO THIRD COUNTRY Q.5V ON PAGE D-7) 07 76-77/ | NONE OF THE ABOVE (SKIP TO FOURTH COUNTRY Q.5GG ON PAGE D-7) 07 22-23/ |

| FIRST COUNTRY | SECOND COUNTRY | THIRD COUNTRY |
|---|---|--|
| 5H. FOR ANY SUBSTANCE CODED IN PREVIOUS QUESTION, ASK: In general, how many days a month (do/did) you come in contact with (SUBSTANCE)? | 5S. FOR ANY SUBSTANCE CODED IN PREVIOUS QUESTION, ASK: In general, how many days a month (do/did) you come in contact with (SUBSTANCE)? | 5DD. FOR ANY SUBSTANCE CODED IN PREVIOUS QUESTION, ASK: In general, how many days a month (do/did) you come in contact with (SUBSTANCE)? |
| Asbestos 24-25/ less than once a month 95 | Asbestos 37-38/ less than once a month 95 | Asbestos 50-51/ less than once a month 95 |
| lonizing or nuclear radiation | lonizing or nuclear radiation 39-40/ | lonizing or nuclear radiation 52-53/ |
| less than once a month 95 | less than once a month 95 | less than once a month 95 |
| Industrial chemicals | Industrial chemicals 41-42/ | Industrial chemicals 54-55/ |
| less than once a month 95 | less than once a month 95 | less than once a month 95 |
| Insecticides or pesticides 30-31/ | Insecticides or pesticides 43-44/ | Insecticides or pesticides 56-57/ |
| less than once a month 95 | less than once a month 95 | less than once a month 95 |
| Degreasing chemicals 132-33/ | Degreasing chemicals 45-46/ | Degreasing chemicals 58-59/ |
| less than once a month 95 | less than once a month 95 | less than once a month |
| Defoliants or herbicides 34-35/ | Defoliants or herbicides 47-48/ | Defoliants or herbicides 60-61/ |
| less than once a month 95 | less than once a month 95 | less than once a month 95 |
| 5I. When you washed to remove the (SUBSTANCES) or used protective clothing or gear when stationed in (COUNTRY) was it all the time, some of the time, or never? | 5T. When you washed to remove the (SUBSTANCES) or used protective clothing or gear when stationed in (COUNTRY) was it all the time, some of the time, or never? | 5EE. When you washed to remove the (SUBSTANCES) or used protective clothing or gear when stationed in (COUNTRY) was it all the time, some of the time, or never? |
| ALL THE TIME 1 | ALL THE TIME 1 SOME OF THE TIME 2 | ALL THE TIME |
| SOME OF THE TIME 2 NEVER(SKIP TO Q.5K PAGE D-7) 3 | NEVER. (SKIP TO Q.5V PAGE D-7) | NEVER(SKIP TO Q5.GG PAGE D-7) 3 |

| FIRST COUNTRY | SECOND COUNTRY | THIRD COUNTRY |
|--|--|---|
| 5J. SHOW PARTICIPANT HAND CARD E. Which of the following did you use on that job? CODE ALL THAT APPLY. | 5U. SHOW PARTICIPANT HAND CARD E. Which of the following did you use on that job? CODE ALL THAT APPLY. | 5FF. SHOW PARTICIPANT HAND CARD E. Which of the following did you use on that job? CODE ALL THAT APPLY. |
| Air filter 01 63-64/ | Air filter 01 10-11/ | Air filter 01 25-26/ |
| Goggles 02 65-66/ | Goggles 02 12-13/ | Goggles 02 27-28/ |
| Face Shield . 03 67-68/ | Face Shield 03 14-15/ | Face Shield 03 29-30/ |
| Special clothing 04 69-70/ | Special clothing 04 16-17/ | Special clothing . 04 31-32/ |
| Washing facilities 05 71-72/ | Washing facilities 05 18-19/ | Washing facilities 05 33-34/ |
| Self contained or supplied air | Self contained or supplied air | Self contained or supplied air breathing |
| breathing apparatus 06 73-74/ | breathing apparatus 06 20-21/ | apparatus 06 35-36/ |
| NONE 07 75-76/ | NONE 07 22-23/ | NONE 07 37-38/ |
| SECOND COUNTRY | THIRD COUNTRY | FOURTH COUNTRY |
| 5K. Are there any other countries that you have been stationed in since (DATE OF LAST INTERVIEW)? | 5V. Are there any other countries that you have been stationed in since (DATE OF LAST INTERVIEW)? | 5GG. Are there any other countries that you have been stationed in since (DATE OF LAST INTERVIEW)? |
| YES(GO BACK TO Q.5L: SECOND COUNTRY ON PAGE D-3) . 1 77/ | YES(GO BACK TO Q.5W: THIRD COUNTRY ON PAGE D-3) 1 24/ | YES (USE NEW QUEX) 1 |
| NO (SKIP TO SECTION E, PAGE E-1) 2 | NO(SKIP TO SECTION E, PAGE E-1) 2 | NO (SKIP TO SECTION E, PAGE E-1) 2 |

| | 1 | * | i | | ä | ۰ | i | ë | ï | ۲ | × | ï | Ë | ě | ě | ě | ì | ř | ř | ١ | Š | • | ř | × | 8 | ÿ | 3 | ì | | Ť | Ŷ | Š | Ï | š | × | Ĭ | Ë | Ĭ | * | 8 | ř | Ï | × | Ï | Ï | 3 | á | 8 | 8 | Ï | C | Š | 1 | Š |) | F | ľ | ¥ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Š | | 8 | × | × | | â | | × | | 8 | | × | | 8 | ě | ä | | Š | | | × | | | | | | | | ä | | | | 8 | | | × | 8 | | | | | | | | | | | | × | × | | | | × | | | | | |

FOR THIS SECTION YOU WILL NEED:

- . HAND CARD G
- . HAND CARD H
- . CHILDREN'S RECORD FORM
- . SUPPLEMENTARY CHILDREN'S RECORD FORM
- SELF-ADMINISTERED FORM 1

| 1 | Now I would | l like to ask | you about | vour persona | I relationships. |
|----|--------------|---------------|-----------|---------------|------------------|
| 1. | INDA I MODIC | i line to asn | | JOGI POICOING | |

When we talked with you during the last interview (DATE OF LAST INTERVIEW), you said you were (MARITAL STATUS FROM ITEM 4 INFORMATION SHEET). Is that correct?

| YES | (GO TO Q.1A) 1 | 40/ |
|---------------------|---|-----|
| NO | (REASK MARITAL STATUS AT TIME OF LAST INTERVIEW, UPDATE ITEM 4, GO TO Q.1A) | |
| MISSIN | IG (ASK MARITAL STATUS AT TIME OF LAST INTERVIEW, RECORD AT ITEM 4, GO TO Q.1A) | |
| IA. AT TIME OF LAST | INTERVIEW, WAS STATUS "MARRIED" OR LIVING WITH SPOUSE? | |
| YES | (SKIP TO Q.1F) | 41/ |
| NO | (GO TO Q.1B) 2 | |

| 1B. | IF NOT LIVING WITH PARTNER AT TIME OF LAST INTERVIEW, SKIP TO 1C, OT we talked with you during the last interview, you said you were living with a partner. | HERWISE ASK: Whe is that correct? |
|-----|---|-----------------------------------|
| | YES (GO TO Q.1C) | |
| | NO (UPDATE ITEM 5, GO TO Q.1C) 2 | |
| 1C. | WAS RESPONDENT "LIVING WITH PARTNER" AT TIME OF LAST INTERVIEW? | |
| | YES (ASK Q.1D) | 42/ |
| | NO (SKIP TO Q.3, PAGE E-5) 2 | |
| 1D. | What is the name of the person you were living with at the time of the last interview? | RECORD BELOW |
| | LAST NAME FIRST NAME | _ |
| 1E. | In what month and year did you start living with (READ NAME FROM Q.1D)? (RECORD MONTH AND YEAR) ENTER MONTH AND YEAR MONTH YEAR | 43-46/ |
| | SKIP TO QUESTION 2, PAGE E-3 | |
| 1F. | According to our records, you were married to (NAME OF SPOUSE FROM ITEM 6 0 SHEET). Is that correct? | ON INFORMATION |
| | YES | 47 / |

ENTER MONTH AND YEAR

| S. In what month and year did you get married to (READ NAME OF SPOUSE)? ENTER MONTH AND YEAR MONTH YEAR | 48-51/ |
|---|-------------------|
| Have you stopped living with (NAME OF SPOUSE OR PARTNER)? | · |
| YES (ASK Q.2A) 1 NO(SKIP TO Q.2C, PAGE E-4) 2 | 52 |
| | |
| A. SHOW PARTICIPANT HAND CARD G. How did this (marriage/relationship) end? responses on the card. | Choose one of the |
| | Choose one of the |
| · | |

54-57/

| 2C. | During this (marriage/relationsh PARTNER) for 3 months or moat least 3 months or more. DO | re since (DATE OF LA | IST INTERVIEW)? Ea | ch separation must nave | OR lasted |
|-----|---|---|-----------------------|---------------------------|--------------|
| | ENTER | NUMBER OF TIMES: | | 58-59/ | |
| | . 0 | R | | | |
| | NONE . | (SKIP TO Q.2N, PA | AGE E-5) 00 | | |
| 2D. | For how many months did you I months or more. DO NOT INCI | ive apart the (first/next) LUDE A CURRENT MA | time? Each separation | on must have lasted at le | east 3 |
| | | FIRST/ONLY TIME: | | 60-61/ | |
| | | SECOND TIME: | | 62-63/ | |
| | | THIRD TIME: | | 64-65/ | |
| | | FOURTH TIME: | | 66-67/ | |
| 2E. | During this (marriage/relationshi conceiving a child because of pi | p), [since the (DATE O rolonged separation? | F LAST INTERVIEW)] | , did you ever have a pr | oblem |
| | YES | | | 1 68/ | |
| | NO | · · · · · · · · · · · · · · · · · · · | | 2 | |
| | SKIP TO Q.2N, PAGE E-5 | | | | |
| 2F. | QUESTION DELETED. | | | BEGIN DECK 14 10-34/R | |
| 2G. | QUESTION DELETED. | | | 35-61/R | |
| 2H. | QUESTION DELETED. | | | 62-74/R | |
| | | | | | |

| 21. | QUESTION DELETED. | BEGIN DECK 15 10-44/R |
|--------------|---|-------------------------------------|
| 2J. | QUESTION DELETED. | 45-46/R |
| 2K. | QUESTION DELETED. | 47-71/R |
| 2L. | QUESTION DELETED. | BEGIN DECK 16 10-36/R 37-49/R |
| 2M. | QUESTION DELETED. | 50-74/R |
| 2N. | HAS R STOPPED LIVING WITH SPOUSE OR PARTNER? IS "YES" CODED AT Q.2 O | N PAGE E-3? |
| | YES 1 | 75/ |
| | NO (SKIP TO Q.10, PAGE E-18) 2 | |
| 3. | Since (DATE OF LAST INTERVIEW), have you done one of the following: (1) reconciled or (2) lived with a <u>partner</u> for 3 months or more? | or married (again); |
| | YES | 76/ |
| | DID NEITHER (SKIP TO Q.10, PAGE E-18) 2 | |
| 3 A . | How many times have you been married or lived with a partner, for at least 3 months since INTERVIEW)? | ce (DATE OF LAST |
| | RECORD NUMBER OF TIMES: | 77/ |

| FIRST | REL | ATIC | NSHIP |
|--------------|-----|------|--------------|
|--------------|-----|------|--------------|

| 4. | Thinking of (that/the first) relationship since (DATE OF LAST INTERVIEW), did you mar | ry this person? |
|---------------|--|-----------------|
| | YES 1 | 78/ |
| | NO | |
| | RECONCILED 3 | |
| 4A. | What is the current full name of (this partner/your wife)? | |
| | | |
| | | ID# |
| | | 79-80/ |
| | (LAST) | |
| | (FIRST) (MIDDLE) | |
| 4 A -1 | . RECORD FULL NAME OF (SPOUSE/PARTNER) AT ITEM 7 ON INFORMATION S RECORD ID# ABOVE. | |
| | What was her full maiden name? | BEGIN DECK 17 |
| | | 10-29/ |
| 4A-2 | . What was her birthdate? RECORD DATE: MO DA YR | 30-35/ |
| 4B. | In what month and year did you (reconcile/get married to/start living with) (NAME FROM | Q.4A)? |
| | ENTER MONTH AND YEAR MONTH YEAR | 36-39/ |

| 4C. | . Have you stopped living with (NAME FROM Q.4A, PAGE E-6)? | |
|-----|---|----------------------|
| | YES 1 | 40/ |
| | NO (SKIP TO Q.4F) | |
| 4D. | . SHOW PARTICIPANT HAND CARD G. How did this (marriage/relationship) end? responses on Card G. | ? Choose one of the |
| | SEPARATION 1 | 41/ |
| | DIVORCE 2 | |
| | DEATH OF SPOUSE OR PARTNER 3 | |
| 4E. | In what month and year did (RESPONSE FROM Q.4D) occur? | |
| | ENTER MONTH AND YEAR MONTH YEAR | 42-45/ |
| 4F. | During this (marriage/relationship), how many times were you living apart from (NA months or more since (DATE OF LAST INTERVIEW)? | AME FROM Q.4A) for 3 |
| | ENTER NUMBER OF TIMES: | 46-47/ |
| | OR | |
| | NONE . (SKIP TO Q.5, PAGE E-9) 00 | |
| 4G. | For how many months did you live apart the (this/first/next) time? | |
| | FIRST/ONLY TIME: | 48-49/ |
| | SECOND TIME: | 50-51/ |
| | THIRD TIME: | 52-53/ |
| | FOURTH TIME: | 54-55/ |

| 4H. | H. During this (marriage/relationship), [since the (DATE OF LAST INTERVIEW)], did you ever have a problem conceiving a child because of prolonged separation? | | | |
|--------------|---|---|-------------------------------------|--|
| | Yes | 1 | 56/ | |
| | No | | | |
| | SKIP TO Q.5, PAGE E-9. | | | |
| | | | | |
| 4i . | QUESTION DELETED. | | 57-80/R | |
| 4 J. | QUESTION DELETED. | | BEGIN DECK 18 10-31/R 32-36/R | |
| 4K. | QUESTION DELETED. | | 37-49/R | |
| 4L. | QUESTION DELETED. | | 50-80/R | |
| 4 M . | QUESTION DELETED. | | BEGIN DECK 19 10-11/R | |
| 4N. | QUESTION DELETED. | | 12-36/R 37-63/R | |

Page E-9

| 40. QUESTION DELETED. | 64-76/R |
|---|----------------------|
| TO. GOLOTION DELETED. | 77/R |
| | 77/11 |
| | BEGIN DECK 20 |
| 4P. QUESTION DELETED. | 10-34/R |
| T. QUESTION DELETED. | |
| 5. IS THERE A SECOND RELATIONSHIP SINCE THE DATE OF LAST INTERVIEW? | IS NI IMPER OF |
| TIMES RECORDED IN Q.3A, PAGE E-5, EQUAL TO 2 OR MORE? | 10 HOMBEN OF |
| TIMES TESSTIBLE IN QUAR, I AGE E'S, EQUAL TO E STIMOTIE. | |
| YES (GO TO Q.6, NEXT PAGE) | 35/ |
| (| |
| NO (SKIP TO Q.10, PAGE E-18) 2 | |

| SECOND | RELATIONSHIP | (SECOND | MOST | RECENT) |
|--------|--------------|---------|------|---------|
|--------|--------------|---------|------|---------|

| 6. · | Thinking of the next relationship since (DATE OF LAST INTERVIEW), did you marry this pe | rson? |
|--------|---|----------------|
| | YES 1 | 36/ |
| | NO | |
| 6A. \ | What is the current full name of this person? | |
| | L | |
| | | ID # 37-38/ |
| | (LAST) | |
| | (FIRST) (MIDDLE) | |
| 6A-1. | RECORD FULL NAME OF (SPOUSE/PARTNER) AT ITEM 7 ON INFORMATION SHEID# ABOVE. | ET. RECORD |
| | What was her full maiden name? | |
| | | 39-58/ |
| 6A-2. | What was her birthdate? RECORD DATE: MO DA YR | 59-64/ |
| 6B. II | n what month and year did you (reconcile/get married to/start living with) (NAME FROM Q.6 | A)? |
| | ENTER MONTH AND YEAR MONTH YEAR | 65-68/ |
| 6C. H | lave you stopped living with (NAME FROM Q.6A)? | |
| | YES | 69/ |
| | NO (SKIP TO Q.6F) 2 | |
| | SHOW PARTICIPANT HAND CARD G. How did this (marriage/relationship) end? Choose of esponses on Card G. | one of the |
| | SEPARATION 1 | 70/ |
| | DIVORCE 2 | |
| | DEATH OF SPOUSE OR PARTNER 3 | |
| | • | |

| 6E. | In what month and year did (RESPONSE FR | OM Q.6D) occur? | |
|-----|--|-------------------------|-------------------------|
| | ENTER MONTH AND YEAR MC | NTH YEAR | 71-74/ |
| 6F. | During this (marriage/relationship), how many months or more since (DATE OF LAST INTE | | AME FROM Q.6A) for 3 |
| | ENTER NUMBE | R OF TIMES: | 75-76/ |
| | OR | | |
| | NONE . (SKIP TO | Q.7, PAGE E-13) 00 | |
| 6G. | For how many months did you live apart the (| (this/first/next) time? | |
| | FIRST/ONLY | TIME: | 77-78/ |
| | SECOND TIME | AE: | 79-80/ |
| | THIRD TIME: | | BEGIN DECK 21 10-11/ |
| | FOURTH TIM | IE: | 12-13/ |
| | During this (marriage/relationship), [since the conceiving a child because of prolonged sepa | | you ever have a problem |
| | YES | | 14/ |
| | NO | 2 | |
| | SKIP TO Q.7, PAGE E-13 | | |

Page E-12

| 61. QUESTION DELETED. | 15-39/R |
|-----------------------|-------------------------------------|
| 6J. QUESTION DELETED. | 40-66/R |
| 6K. QUESTION DELETED. | 67-79/R |
| 6L. QUESTION DELETED. | BEGIN DECK 22 10-29/R 30-44/R |
| 6M. QUESTION DELETED. | 45-46/R |
| 6N. QUESTION DELETED. | 47-71/R |
| | BEGIN DECK 23 10-29/R 30-36/R |

| V | | |
|-----|---|-----------------|
| 6O. | QUESTION DELETED. | 37-49/R |
| 6P. | QUESTION DELETED. | 50/R 51-75/R |
| 7. | IS THERE A THIRD RELATIONSHIP SINCE THE DATE OF LAST INTERVIEW? | |
| | IS NUMBER OF TIMES RECORDED IN Q.3A, PAGE E-5 EQUAL TO 3 OR MORE? | |
| | YES (GO TO Q.8, NEXT PAGE) 1 | 76/ |
| | NO (SKIP TO Q.10. PAGE E-18) 2 | |

| TH | IRD | REL | ATIC | NSHIP |
|----|-----|-----|------|-------|
|----|-----|-----|------|-------|

| 3. Th | ninking of the next relationship since (DATE OF LAST INTERVIEW), did you marry th | is person? |
|--------------|--|--------------|
| | YES 1 | 77/ |
| | NO | |
| A. W | hat is the current full name of this person? | |
| | | |
| | | ID# |
| | (LAST) | 78-79/ |
| | (FIRST) (MIDDLE) | |
| BA-1. | RECORD FULL NAME OF (SPOUSE/PARTNER) AT ITEM 7 ON INFORMATION | SHEET. |
| | RECORD ID# ABOVE. | BEGIN DECK 2 |
| | What was her full maiden name? | |
| | | _ 10-29/ |
| | What was her birthdate? RECORD DATE: MO DA YR | 30-35/ |
| B. In | what month and year did you (reconcile/get married to/start living with) (NAME FRO | M Q.8A)? |
| | ENTER MONTH AND YEAR MONTH YEAR | 36-39/ |
| C. Ha | ave you stopped living with (NAME FROM Q.8A)? | |
| | YES | 40/ |
| | NO (SKIP TO Q.8F) 2 | |
| ID. SI Ch | HOW PARTICIPANT HAND CARD G. How did this (marriage/relationship) end? | |
| | SEPARATION 1 | 41/ |
| | DIVORCE 2 | |
| | DEATH OF SPOUSE OR PARTNER 3 | |
| | | |

| 8E. | In what month and year did this occur? | | |
|-----|---|--|---------------------|
| | ENTER MONTH AND YEAR MONT | H YEAR | 42-45/ |
| 8F. | During this (marriage/relationship), how many time months or more since (DATE OF LAST INTERV | nes were you living apart from (NAME IEW)? | FROM Q.8A) for 3 |
| | ENTER NUMBER (| OF TIMES: | 46-47/ |
| | OR | | |
| | NONE . (GO TO Q.9, | , PAGE E-17) 00 | |
| 8G. | For how many months did you live apart the (this | s/first/next) time? | |
| | FIRST/ONLY TIME | ME: | 48-49/ |
| | SECOND TIME: | | 50-51/ |
| | THIRD TIME: | | 52-53/ |
| | FOURTH TIME: | | 54-55/ |
| 8H. | During this (marriage/relationship), [since the (D/conceiving a child because of prolonged separati | ATE OF LAST INTERVIEW)], did you dion? | ever have a problem |
| | YES | 1 | 56/ |
| | NO | 2 | |
| | SKIP TO Q.9, PAGE E-17 | | |

| 8I. QUESTION DELETED. | 57-80/R |
|-----------------------|-------------------------------------|
| 8J. QUESTION DELETED. | BEGIN DECK 25 10-36/R |
| 8K. QUESTION DELETED. | 37-49/R |
| 8L. QUESTION DELETED. | 50-74/R |
| 8M. QUESTION DELETED. | 75-76/R |
| 8N. QUESTION DELETED. | BEGIN DECK 26 10-34/R 35-61/R |

| 80. | QUESTION DELETED. | 62-74/R 75/R |
|-----|--|--------------------------|
| 8P. | QUESTION DELETED. | BEGIN DECK 27 10-34/R |
| 9. | IS THERE A FOURTH RELATIONSHIP SINCE THE DATE OF LAST INTERVIEW? | |
| | IS NUMBER OF TIMES RECORDED IN Q.3A, EQUAL TO 4 OR MORE? | |
| | YES (GO TO NEW QUESTIONNAIRE) 1 | 35/ |
| | NO | |

| 10. | NOW YOU WILL VERIFY BIOLOGICAL CHILDREN USING CHILDREN'S RECORD FORM: THIS FORM INCLUDES R'S BIOLOGICAL CHILDREN AS OF DATE OF LAST INTERVIEW. |
|------|---|
| | ARE CHILDREN LISTED ON CHILDREN'S RECORD FORM? |
| | YES (ASK Q.10A) |
| | NO (ASK Q.10B) |
| 10A. | I'd like to read information about your (child/children) from our last interview to check our records. As of (DATE OF LAST INTERVIEW), our records show that you have had (NUMBER OF CHILDREN). |
| | NEXT, READ EACH CHILD'S FULL NAME, SEX, AND BIRTHDATE AND MOTHER'S NAME. Is that correct? |
| | YES, CHILDREN ARE CORRECT. IF INFORMATION IS CORRECT (GO TO Q.11) 1 37/ |
| | NO(IF INFORMATION IS INCOMPLETE, MAKE CORRECTIONS FOR EACH CHILD ON CHILDREN'S RECORD FORM. CORRECT FULL NAME, SEX, DOB, MOTHER'S MAIDEN NAME. THEN GO TO Q.11) 2 |
| 10B. | Our records show that you had <u>not</u> had any children of your own <u>as of</u> (DATE OF LAST INTERVIEW). Is that correct? |
| | YES, IF INFORMATION IS CORRECT (GO TO Q.12) 1 38/ |
| | NO/MISSING (IF CHILDREN MISSING, ADD TO CHILDREN'S RECORD FORM. RECORD BEGINNING AT LINE 01 ON CHILDREN'S RECORD FORM. THEN GO TO Q.11) 2 |

11. NOW YOU WILL UPDATE EACH CHILD'S AGE. ASK THIS QUESTION FOR EACH CHILD LISTED ON CHILDREN'S RECORD FORM FOR WHOM THERE IS NO DEATH DATE: What is (READ NAME OF 1ST CHILD/NAME OF 2ND CHILD, SO FORTH)'s current age? UPDATE AGE ON CHILDREN'S RECORD FORM.

NOW YOU WILL ASK IF ANY OF THE CHILDREN HAVE DIED: Have any of your children died since (DATE OF LAST INTERVIEW)? FOR EACH CHILD THAT DIED, RECORD CHILD ID# IN QUESTIONNAIRE AND ASK QUESTIONS 11A THROUGH 11C. IF NO CHILDREN HAVE DIED, SKIP TO Q.12.

- 11A. FOR EACH DECEASED CHILD ASK: When did (NAME OF CHILD) die? RECORD DAY, MONTH, AND YEAR ON CHILDREN'S RECORD FORM.
- 11B. What was the cause of death? RECORD BELOW.

BEGIN DECK 28

11C. Where is (CHILD)'s death registered? In what city and state? RECORD BELOW.

| CHILD ID: 39- | J 0/ | CHILD ID: | 60-61/ | CHILD ID: [10-11/ |
|-----------------------|----------|-------------|--------|--------------------------|
| CAUSE: | 11/ | CAUSE: | 62/ | CAUSE:12/ |
| REGISTRATION:CITY 42- | | GISTRATION: | 63-78/ | REGISTRATION:CITY 13-28/ |
| STATE 58- | 9/ | STATE | 79-80/ | STATE 29-30/ |

| 12. H IN | IAS R BEEN MARRIED OR HAD A PARTNER FOR 3 MONTHS OR MORE SINCE (DINTERVIEW)? VERIFY WITH R. | ATE OF LAST |
|---------------|---|--------------------------|
| | YES (ASK Q.12A) | 31/ |
| | NO (SKIP TO SECTION F, PAGE F-1) 2 | · |
| 12 A . | Has/Have (your wife/any of your partners) become pregnant by you since (DATE OF INTERVIEW)? This includes pregnancies that began before (DATE OF LAST INTERVIEW). | LAST RVIEW) and ended |
| | YES (ASK Q.12B) | 32/ |
| | NO (SKIP TO Q.25, PAGE E-35) 2 | |
| 12B. | How many pregnancies (has your wife/have your partners) had with you since (DATI INTERVIEW)? | E OF LAST |
| | ENTER NUMBER OF PREGNANCIES: | 33-34/ |

| CIDOT | PREGN | |
|-------|--------|--------|
| FIRST | PRELIE | IANI.T |

| 13. W | /hen did the first pre | gnancy begin? | What month a | ınd year | ? | | |
|-------|-----------------------------------|------------------|--------------|----------|------------|---------------|----------|
| | - | ENTER MONTI | H AND YEAR | | MONTH L | YEAR | 35-38/ |
| 13A. | HAS R HAD MORI CODED AT Q.3, P | | RELATIONSHIP | P SINCE | DATE OF LA | ST INTERVIEW? | IS "YES" |
| | YES | (ASK Q.13 | 3B) | | | 1. 1 | 39/ |
| | NO | (SKIP TO | Q.13C) | | | 2 | |
| 13B. | Which (spouse/par | tner) had this p | regnancy? | | | | |
| | RECORD NAME: | (LAST) | (M | IAIDEN) | | - | 40-64/ |
| | | (FIRST) | (M | IIDDLE) | | - | |
| | RECORD ID # FRO | OM INFORMAT | ION SHEET. | | | | |
| | | | | | | | 65-66/ |

| 13C. | How many months did it take (NAME OF SPOUSE/PARTNER) to become | pregnant (this ti | me)? |
|------|--|--------------------------------------|----------------------------|
| | RECORD MONTHS AND/OR AND/OR YEARS MOS YRS | | 67-68/ |
| | WASN'T TRYING | · | 69-70/ |
| 13D. | Were either you or (NAME OF SPOUSE/PARTNER) using birth control at pregnant? | the time she bec | ame |
| | YES (ASK Q.13E) | 1 | 71/ |
| | NO (SKIP TO Q.14) | 2 | |
| 13E. | SHOW PARTICIPANT HAND CARD H. Please look at this card and tell mof birth control you and (NAME FROM Q.13B) were using when she became THAT APPLY. | ne all the number ne pregnant. Co | rs of the types DDE ALL |
| | 1. PILL | 01 | 72-73/ |
| | 2. DOUCHE | • • | 74-75/ |
| | 3. FOAM | | 76-77/ |
| | 4. JELLY, CREAM, SUPPOSITORY | | 78-79/ |
| | 4. ULLEI, OHLAM, OOH OOHOH | BE | GIN DECK 29 |
| | 5. IUD | | 10-11/ |
| | 6. CONDOM, RUBBER | | 12-13/ |
| | 7. DIAPHRAGM | | 14-15/ |
| | 8. DIAPHRAGM AND JELLY | 08 | 16-17/ |
| | 9. SPONGE | 09 | 18-19/ |
| | 10. RHYTHM - CALENDAR | 10 | 20-21/ |
| | 11. RHYTHM - TEMPERATURE | | 22-23/ |
| | 12. WITHDRAWAL | 12 - | 24-25/ |
| | | 13 | 26-27/ |
| | DON'T KNOW | 98 | 28-29/ |
| | Did that pregnancy result in a live birth; or in a miscarriage, stillbirth, or abortic pregnant]? | on, [or is (NAME) | still |
| | LIVE BIRTH | 1 | 30/ |
| · | MISCARRIAGE (SKIP TO Q.16) | | |
| | ABORTION (SKIP TO Q.16) | | |

| 14 A . | What is the first and last name of the child as it appears on the birth certificate? RECORD ON SUPPLEMENTARY CHILDREN'S RECORD FORM. | |
|---------------|--|---------|
| | RECORD ID FROM SUPPLEMENTARY CHILDREN'S RECORD FORM | 31-32/ |
| 14B. | When was (CHILD) born? ENTER BIRTHDATE ON SUPPLEMENTARY CHILDREN'S RECOR | D FORM. |
| 14C. | Was (CHILD) male or female? RECORD ON SUPPLEMENTARY CHILDREN'S RECORD FOR | RM. |
| 14D. | How much did (CHILD) weigh at birth? | |
| | ENTER POUNDS: | 33-34/ |
| | OUNCES: | 35-36/ |
| | OR DON'T KNOW 98 | |
| 14E. | Was (CHILD) a twin? | |
| | YES 1 | 37/ |
| | NO | |
| 14F. | Was (CHILD) premature, full term, or overdue? | |
| | PREMATURE 1 FULL TERM 2 OVERDUE 3 DON'T KNOW 8 | 38/ |
| 14G. | How old was (NAME OF MOTHER) when (CHILD) was born? | |
| | RECORD AGE: | 39-40/ |
| | DON'T KNOW 98 | |

| NAME OF HOSPITAL TREET ADDRESS | | 41/ |
|---|---|--|
| | | |
| FREET ADDRESS | | |
| | · | |
| | | |
| STATE) | | |
| • | | |
| is the name and address of the doctor or medical facility who has (CHII ds? RECORD BELOW. | LD)'s current medical | |
| | | 42/ |
| OCTOR'S NAME OR FACILITY NAME | | |
| TREET ADDRESS | | |
| COTATE | | |
| CITY) (STATE) | | |
| ORD NAME AND ADDRESS ON MEDICAL CONSENT FORM | | |
| s child still living? IF NO, SKIP TO Q.14K. IF YES, ASK: What is child | l's current age? | |
| ORD AGE ON SUPPLEMENT CHILDREN'S FORM. SKIP TO Q.15. | | |
| n did (CHILD) die? | | |
| ORD DAY, MONTH, AND YEAR ON SUPPLEMENTARY CHILDREN'S | RECORD FORM. | |
| was the cause of death? RECORD BELOW. | | • |
| | | 43/ |
| re is (CHILD'S) death registered? In what city and state? | • | |
| I L | | |
| SITY) | (1 .) | 44-59 60-61 |
| | ORD NAME AND ADDRESS ON MEDICAL CONSENT FORM is the name and address of the doctor or medical facility who has (CHII ds? RECORD BELOW. OCTOR'S NAME OR FACILITY NAME TREET ADDRESS CITY) (STATE) ORD NAME AND ADDRESS ON MEDICAL CONSENT FORM IS child still living? IF NO, SKIP TO Q.14K. IF YES, ASK: What is child ORD AGE ON SUPPLEMENT CHILDREN'S FORM. SKIP TO Q.15. In did (CHILD) die? ORD DAY, MONTH, AND YEAR ON SUPPLEMENTARY CHILDREN'S IT WAS the cause of death? RECORD BELOW. The is (CHILD'S) death registered? In what city and state? | DRD NAME AND ADDRESS ON MEDICAL CONSENT FORM is the name and address of the doctor or medical facility who has (CHILD)'s current medical ds? RECORD BELOW. OCTOR'S NAME OR FACILITY NAME TREET ADDRESS CITY) (STATE) DRD NAME AND ADDRESS ON MEDICAL CONSENT FORM is child still living? IF NO, SKIP TO Q.14K. IF YES, ASK: What is child's current age? ORD AGE ON SUPPLEMENT CHILDREN'S FORM. SKIP TO Q.15. In did (CHILD) die? ORD DAY, MONTH, AND YEAR ON SUPPLEMENTARY CHILDREN'S RECORD FORM. It was the cause of death? RECORD BELOW. |

| | IS THERE A SECOND PREGNANCY SINCE THE DATE OF LAST INTERVIEW? IS NUMBI PREGNANCIES IN Q.12B ON PAGE E-20 EQUAL TO 2 OR MORE? | ER OF |
|------|--|--------|
| | YES (SKIP TO Q.17) | 62/ |
| | NO (SKIP TO Q.25, PAGE E-35) 2 | |
| 16. | When did that pregnancy end? | |
| | RECORD DATE: | 63-68/ |
| | MO DA YR | |
| 16A | How many weeks had (NAME FROM Q.13B) been pregnant when that happened? | |
| | ENTER NUMBER OF WEEKS: | 69-70/ |
| | DON'T KNOW 98 | |
| 16B. | IF CODE "2" OR "3" IN Q.14, MISCARRIAGE OR STILLBIRTH, ASK Q.16B-C. OTHERS Q.16D. Did a doctor tell you why this (miscarriage/stillbirth) might have occurred? | GO TO |
| | YES (ASK Q.16C) 1 | 71/ |
| | NO (SKIP TO Q.16D) 2 | V |
| 16C. | What did the doctor say caused the (miscarriage/stillbirth)? RECORD VERBATIM. | |
| | | 72/ |
| 16D. | IS THERE A SECOND PREGNANCY SINCE DATE OF LAST INTERVIEW? IS NUMBER PREGNANCIES IN Q.12B ON PAGE E-20 EQUAL TO 2 OR MORE? | OF |
| | YES (GO TO Q.17) 1 | 73/ |
| | NO (SKIP TO Q.25, PAGE E-35) . 2 | |

| SEC | COND PREGNANCY | • |
|------|--|-----------------|
| 17. | When did the next pregnancy begin? What month and year? | |
| | ENTER MONTH AND YEAR MONTH YEAR | 74-77/ |
| 17A. | HAS R HAD MORE THAN ONE RELATIONSHIP SINCE DATE OF LAST INTERVIEW? (SEE ITEM 7, INFORMATION SHEET.) | |
| | YES (ASK Q.17B) | 78/ |
| | _ | EGIN DECK 30 |
| 17B. | . Which (spouse/partner) had this pregnancy? | |
| | RECORD NAME:(LAST) | 10-34/ |
| | (FIRST) (MIDDLE) | |
| | RECORD ID # FROM INFORMATION SHEET. | 35-36/ |
| 17C. | . How many months did it take (NAME OF SPOUSE/PARTNER) to become pregnant (this ti RECORD MONTHS AND/OR YRS AND/OR YEARS MOS YRS | ime)? 37-38/ |
| | WASN'T TRYING | 39-40/ |
| 17D. | . Were either you or (NAME OF SPOUSE/PARTNER) using birth control at the time she become pregnant? | came |
| | YES (ASK Q.17E) 1 | 41/ |
| | NO (SKIP TO Q.18, PAGE E-27) 2 | |

| 17E. | SHOW PARTICIPANT HAND CARD H. Please look at card H again and tell r types of birth control you and (NAME FROM Q.17B) were using when she becall THAT APPLY. | ne all the numbers of the ame pregnant. CODE |
|------|--|--|
| | 1. PILL | 42-43/ |
| | 2. DOUCHE | 44-45/ |
| | 3. FOAM | 46-47/ |
| | 4. JELLY, CREAM, SUPPOSITORY | 48-49/ |
| | 5. IUD | 50-51/ |
| | 6. CONDOM, RUBBER | 52-53/ |
| | 7. DIAPHRAGM | 54-55/ |
| | 8. DIAPHRAGM AND JELLY | 56-57/ |
| | 9. SPONGE | 58-59/ |
| | 10. RHYTHM - CALENDAR | 60-61/ |
| | 11. RHYTHM - TEMPERATURE | 62-63/ |
| | 12. WITHDRAWAL | 64-65/ |
| | 13. OTHER (SPECIFY) | 04-05/ |
| | 13 | 66-67/ |
| | DON'T KNOW | 68-69/ |
| | LIVE BIRTH | |
| | MISCARRIAGE. | |
| | ABORTION (SKIP TO Q.20) | |
| 18A. | STILL PREGNANT (SKIP TO Q.25, PAGE 35) 5 | |
| IOA. | STILL PREGNANT (SKIP TO Q.25, PAGE 35) | |
| IOA. | STILL PREGNANT (SKIP TO Q.25, PAGE 35) 5 What is the first and last name of the child as it appears on the birth certificate? | 71-72/ |
| 18B. | STILL PREGNANT (SKIP TO Q.25, PAGE 35) | 71-72/ |
| | STILL PREGNANT (SKIP TO Q.25, PAGE 35) | 71-72/ REN'S RECORD FORM. |

| How much did (CHILD) weig | in at dirth? | |
|--|--|---------------|
| | ENTER POUNDS: | 73-74/ |
| | AND | • |
| | OUNCES: | 75-76/ |
| | OR DON'T KNOW 98 | |
| Was (CHILD) a twin? | | |
| YES | | 771 |
| NO | 2 | |
| Was (CHILD) premature, full | term, or overdue? | |
| • | | |
| PREMATURE FULL TERM OVERDUE | | 78/ |
| PREMATURE FULL TERM OVERDUE DON'T KNOW | | 78 / |
| PREMATURE FULL TERM OVERDUE DON'T KNOW How old was (NAME OF MO | | 78/ 79-80/ |
| PREMATURE FULL TERM OVERDUE DON'T KNOW How old was (NAME OF MO | 2 3 8 8 OTHER) when (CHILD) was born? | |
| PREMATURE FULL TERM OVERDUE DON'T KNOW How old was (NAME OF MO | 2 3 8 OTHER) when (CHILD) was bom? RECORD AGE: | 79-80/ |
| PREMATURE FULL TERM OVERDUE DON'T KNOW How old was (NAME OF MO | 2 3 8 OTHER) when (CHILD) was bom? RECORD AGE: Don't know 98 | 79-80/ |
| PREMATURE FULL TERM OVERDUE DON'T KNOW How old was (NAME OF MO | 2 3 8 OTHER) when (CHILD) was bom? RECORD AGE: Don't know 98 | 79-80/ |
| PREMATURE FULL TERM OVERDUE DON'T KNOW How old was (NAME OF MO | 2 3 8 OTHER) when (CHILD) was bom? RECORD AGE: Don't know 98 | 79-80/ |
| PREMATURE FULL TERM OVERDUE DON'T KNOW How old was (NAME OF MO | 2 3 8 OTHER) when (CHILD) was bom? RECORD AGE: Don't know 98 | 79-80/ |

| 18i. | What is the name and RECORD BELOW. | address of th | ne doctor or medical facility who has (CHIL | D)'s current medical records: |
|-------|------------------------------------|------------------------------|---|-------------------------------|
| | DOCTOR'S NAME | OR | FACILITY NAME | |
| | STREET ADDRESS | | | |
| | (CITY) | | (STATE) | |
| | RECORD NAME AND | ADDRESS O | N MEDICAL CONSENT FORM. | |
| 18J. | Is this child still livin | ig? IF NO, SI IENT CHILDE | KIP TO Q.18K. IF YES, ASK: What is ch | ild's current age? RECORD |
| 18K. | When did (CHILD) (RECORD FORM. | die? RECOR | D DAY, MONTH, AND YEAR ON SUPPLE | EMENTARY CHILDREN'S |
| 18L. | What was the cause | e of death? F | RECORD BELOW. | BEGIN DECK 31 |
| | | | | 10/ |
| 18M. | Where is (CHILD'S) | death registe | ered? In what city and state? | |
| | (CITY) | | | _ - - |
| | 11-26/ | | · | 27-28/ |
| 19. | IS THERE A THIRD PREGNANCIES IN | PREGNANC Q.12B ON PA | Y SINCE THE DATE OF LAST INTERVIE NGE E-20 EQUAL TO 3 OR MORE? | W? IS NUMBER OF |
| | YES | (SKIP TO | Q.21) | 29/ |
| | NO | (SKIP TO | Q.25, PAGE E-35) | ! |
| 20. V | When did that pregnand | y end? | | |
| | | RECO | ORD DATE: | 30-35/ |
| 20A. | How many weeks ha | d (NAME FR | MO DA OM Q.17B, PAGE E-26) been pregnant wi | YR |
| | • | • | | non that happened: |
| | | ENTE | ER NUMBER OF WEEKS: | 36-37/ |
| | | | T KNOW 98 | 30-3 1/ |
| | | | | |

| 20B. | IF CODE "2" OR "3" IN Q.18, MISCARRIAGE OR STILLBIRTH, ASK Q.20B-C; OTHERS Did a doctor tell why this (miscamage/stillbirth) might have occurred? | S GO TO Q.20D. |
|------|---|----------------|
| | YES (ASK Q.20C) 1 | 38/ |
| | NO (SKIP TO Q.20D) 2 | • |
| 20C. | What did the doctor say caused the (miscarriage/stillbirth)? RECORD VERBATIM. | |
| | | 39/ |
| 20D. | IS THERE A THIRD PREGNANCY SINCE DATE OF LAST INTERVIEW? IS NUMBER PREGNANCIES IN Q.12B ON PAGE E-20 EQUAL TO 2 OR MORE? | OF |
| | YES (GO TO Q.21) 1 | 40/ |
| | NO (SKIP TO Q.25, PAGE E-35) . 2 | |

| THIR | RD PREGNANCY | |
|------|---|--------------------|
| 21. | When did the next pregnancy begin? What month and year? | |
| | ENTER MONTH AND YEAR MONTH YEAR | 41-44/ |
| 21A. | HAS R HAD MORE THAN ONE RELATIONSHIP SINCE DATE OF LAST INTERINFORMATION SHEET.) | VIEW? (SEE ITEM 7, |
| | YES (ASK Q.21B) 1 | 45/ |
| | NO (SKIP TO Q.21C) 2 | |
| 21B. | Which (spouse/partner) had this pregnancy? | |
| | RECORD NAME: (LAST) (MAIDEN) | 46-70/ |
| • | (FIRST) (MIDDLE) | |
| | RECORD ID # FROM INFORMATION SHEET. | |
| | | 71-72/ |
| 21C. | How many months did it take (NAME OF SPOUSE/PARTNER) to become pregnate | nt (this time)? |
| | RECORD MONTHS AND/OR AND/OR YEARS MOS YRS | 73-74/ |
| | WASN'T TRYING | 75-76/ |
| 21D. | Were either you or (NAME OF SPOUSE/PARTNER) using birth control at the time pregnant? | she became |
| | YES (ASK Q.21E) | 771 |
| | NO (SKIP TO Q.22) 2 | |

| 21E. | SHOW PARTICIPANT HAND CARD H. Please look at card H again and to types of birth control you and (NAME FROM Q.21B) were using when she to ALL THAT APPLY. | pecame pr | egnant. CODE |
|---------------|--|----------------|---------------|
| | ALL HIATARIET. | BEGIN D | ECK 32 |
| | 1. PILL | 01 | 10-11/ |
| | 2. DOUCHE | 02 | 12-13/ |
| | 3. FOAM | 03 | 14-15/ |
| | 4. JELLY, CREAM, SUPPOSITORY | 04 | 16-17/ |
| | 5. IUD | 05 | 18-19/ |
| | 6. CONDOM, RUBBER | 06 | 20-21/ |
| | 7. DIAPHRAGM | 07 | 22-23/ |
| | 8. DIAPHRAGM AND JELLY | 08 | 24-25/ |
| | 9. SPONGE | 09 | 26-27/ |
| | 10. RHYTHM - CALENDAR | 10 | 28-29/ |
| | 11. RHYTHM - TEMPERATURE | 11 | 30-31/ |
| | 12. WITHDRAWAL | 12 | 32-33/ |
| | 13. OTHER (SPECIFY) | - | 01 00 |
| | | 12 | 34-35/ |
| | | 10 | 36-37/ |
| | DON'T KNOW | 90 | 30-377 |
| pr | cegnant]? | 1 | 38/ |
| | MISCARRIAGE(SKIP TO Q.24) | 2 3 | · |
| | ABORTION (SKIP TO Q.24) | 4 5 | |
| 22 A . | What is the first and last name of the child as it appears on the birth certificated RECORD ON SUPPLEMENTARY CHILDREN'S RECORD FORM. | ate? | |
| | RECORD ID FROM SUPPLEMENTARY CHILDREN'S RECORD FORM: | | 39-40/ |
| 22B. | When was (CHILD) born? ENTER BIRTHDATE ON SUPPLEMENTARY CH | HLDREN'S | S RECORD FORM |
| 22C. | Was (CHILD) male or female? RECORD ON SUPPLEMENTARY CHILDRE | N'S REC | ORD FORM. |
| | | - | |

| 22D. | How much did (CHILD) v | veigh at birth? | |
|------|--------------------------|---|-----------|
| | | ENTER POUNDS: | 41-42/ |
| | | OUNCES: | 43-44/ |
| | | OR DON'T KNOW 98 | |
| 22E. | Was (CHILD) a twin? | | |
| | YES | | 45/ |
| | NO | | |
| 22F. | Was (CHILD) premature, | full term, or overdue? | |
| | FULL TERM OVERDUE | | 46/ |
| 22G. | How old was (NAME OF | MOTHER) when (CHILD) was born? | |
| • | | RECORD AGE: | 47-48/ |
| | | DON'T KNOW 98 | |
| 22H. | What is the name and add | dress of the hospital where this child was born? RECC | ORD BELOW |
| | NAME OF HOSPITAL | | |
| | STREET ADDRESS | | |
| | (CITY) | (STATE) | |
| | • | \-···- | |

B-69

RECORD NAME AND ADDRESS ON MEDICAL CONSENT FORM

| 221. | What is the name and RECORD BELOW. | address of t | the doctor or medical facili | ity who has (CHILD)'s cun | rent medical records? |
|------|---|-------------------------|--|---|-----------------------|
| | DOCTOR'S NAME | OR | FACILITY NAME | | |
| | STREET ADDRESS | | · | | |
| | | | | 10TATE) | |
| | (CITY) | | | (STATE) | |
| | RECORD NAME AND | ADDRESS | ON MEDICAL CONSENT | FORM | |
| 22J. | Is this child still livin AGE ON SUPPLEM | g? IF NO, IENT CHILL | SKIP TO Q.22K. IF YES, DREN'S FORM. SKIP TO | ASK: What is child's curr Q.23. | rent age? RECORD |
| 22K. | . When did (CHILD) of RECORD FORM. | lie? RECO | RD DAY, MONTH, AND Y | YEAR ON SUPPLEMENTA | ARY CHILDREN'S |
| 22L. | What was the cause | of death? | RECORD BELOW. | | |
| | | | | | 49/ |
| 22M | . Where is (CHILD'S) | death regis | stered? In what city and s | itate? | |
| | (CITY) | | | (STATE) | 66-67/ |
| 23. | | | ANCY SINCE THE DATE IAL TO 4 OR MORE? | OF LAST INTERVIEW? | |
| | YES | (GO TO | NEW QUESTIONNAIRE |) 1 | 68/ |
| | NO | (SKIP T | O Q.25, PAGE E-35) | 2 | |
| 24. | When did that pregnand | cy end? | | | |
| | | RE | CORD DATE: MO | DA YR | 69-74/ |
| 24A. | How many weeks ha | ad (NAME F | Rgnant when that happer | ned? | |
| | | EN | TER NUMBER OF WEEK | s: | 75-76/ |
| | | DC | NT KNOW | 98 | |
| 24B. | IF CODE "2" OR "3" TO Q.24D. Did a do | IN Q.22, Moctor tell wh | IISCARRIAGE OR STILLE by this (miscarriage/stillbirtl | BIRTH, ASK Q.24B AND (h) might have occurred? | 2.24C. OTHERS GO |
| | YES | (AS | SK Q.24C) | 1 | 77/ |
| 24C. | | | (IP TO Q.24D) the (miscarriage/stillbirth) | | |

| | 78/ |
|---|-----------------------|
| 24D. IS THERE A FOURTH PREGNANCY SINCE DATE OF LAST INTERVIEW? IS I PREGNANCIES IN Q.12B ON PAGE E-20 EQUAL TO 4 OR MORE? | NUMBER OF |
| YES (GO TO NEW QUESTIONNAIRE) 1 | 7 9/ |
| NO (GO TO Q.25) 2 | • |
| 25. Since (DATE OF LAST INTERVIEW) have you ever tried for a period of one year or a child and were not able to do so? | more, to conceive a |
| YES 1 | BEGIN DECK 33 10/ |
| NO (SKIP TO SECTION F, PAGE F-1) 2 | |
| 6. For how many periods of one year or more did this happen? (PROBE: Was it one periods) | eriod, two periods ?) |
| ONE 1 | 11/ |
| TWO | |
| 7. Since (DATE OF LAST INTERVIEW), in what month and year did the first period begin And in what month and year did it end? | n? |
| BEGIN 12-15/ END OR HAS NOT ONDER MONTH YEAR MONTH YEAR | 16-19/ |
| 3. During this first period, what was your wife or partner's first name? RECORD BELOW | <i>'</i> . |
| | 20-33/ # 34-35/ |
| How old was (NAME OF WIFE/PARTNER) in (BEGINNING DATE OF PERIOD)? | |
| RECORD AGE: | 36-37/ |

| 30. | ring this first period, did either of you see a doctor to discuss any difficulties in conceiving children? | | |
|-------------|--|--------------|--|
| | YES 1 3 | 38/ | |
| | NO 2 | | |
| 31. | ON BLUE SELF ADMINISTERED FORM 1, CODE "PERIOD 1." GIVE BLUE FORM TO R, AND THESE INSTRUCTIONS. | O READ | |
| | There are many reasons that some couples find it difficult or impossible to conceive a child. Please this form and circle the number on Side A for each reason which applied to <u>you</u> for this period. So provides reasons appropriate for <u>your spouse</u> . Circle as many responses as appropriate for you a spouse. | ide B | |
| | Now please fill out Side A for yourself and Side B for your spouse on this form. | | |
| 32. | IS THERE A SECOND PERIOD OF INFERTILITY SINCE DATE OF LAST INTERVIEW? IS Q.26 E-35 CODED "TWO" OR MORE? | ON PAGE | |
| | YES (GO TO Q.33) | | |
| | NO (INSTRUCT R TO PUT SELF- ADMINISTERED FORM 1 IN ENVELOPE AND SKIP TO SECTION F, PAGE F-1) 2 | | |
| 33. | Since (DATE OF LAST INTERVIEW), in what month and year did the second period begin? And month and year did it end? | in what | |
| | BEGIN 40-43/ END 44-4 OR HAS NOT LL - LL ENDED | 17 / | |
| 34. | During this second period, what was your wife or partner's first name? RECORD BELOW. | | |
| | L | | |
| 35 . | How old was (NAME OF WIFE/PARTNER) in (BEGINNING DATE OF PERIOD)? | | |
| | RECORD AGE: 64-6 | 6 5 / | |
| 36. | During this second period, did either of you see a doctor to discuss any difficulties in conceiving ch | nildren? | |
| | YES 1 66/ | | |
| | NO | | |

| 37 | . CODE "PERIOD 2" AND ASK PARTICIPANT TO READ SELF-ADMINISTERED FORM 1. INSTRUCTIONS BELOW. | READ | |
|-----|---|------------------|--|
| | There are many reasons that some couples find it difficult or impossible to conceive a child this form and circle the number on Side A for each reason which applied to <u>you</u> for this per provides reasons appropriate for <u>your spouse</u> . Circle as many responses as appropriate for <u>spouse</u> . | od. Side B | |
| | Now please fill out Side A for yourself and Side B for your spouse on this form. | | |
| 38. | IS THERE A THIRD PERIOD OF INFERTILITY SINCE DATE OF LAST INTERVIEW? (IS G"THREE" OR MORE?) | Q.26 CODED | |
| | YES (GO TO Q.39) 1 | 67/ | |
| | NO (INSTRUCT R TO PUT SELF- ADMINISTERED FORM 1 IN ENVELOPE AND SKIP TO SECTION F, PAGE F-1) | | |
| 39. | Since (DATE OF LAST INTERVIEW), in what month and year did the third period begin? And in what month and year did it end? | | |
| | BEGIN 68-71/ END OR HAS NOT L L ENDED | 72-75/ | |
| 40. | | GIN DECK 34 | |
| | [| 10-23/ 24-25/ | |
| 41. | How old was (NAME) in (BEGINNING DATE OF PERIOD)? | | |
| | RECORD AGE: | 26-27/ | |
| 42. | 2. During this third period, did either of you see a doctor to discuss any difficulties in conceiving children? | | |
| | YES 1 | 28/ | |

43. CODE "PERIOD 3" AND ASK PARTICIPANT TO READ SELF ADMINISTERED FORM 1. READ INSTRUCTIONS BELOW.

There are many reasons that some couples find it difficult or impossible to conceive a child. Please read this form and circle the number on Side A for each reason which applied to <u>you</u> for this period. Side B provides reasons appropriate for your spouse. Circle as many responses as appropriate for you and your spouse.

Now please fill out Side A for yourself and Side B for your spouse on this form.

44. IS THERE A FOURTH PERIOD OF INFERTILITY SINCE DATE OF LAST INTERVIEW? (IS Q.26 CODED "FOUR" OR MORE?)

YES (GO TO NEW QUESTIONNAIRE) 1

NO (INSTRUCT R TO PUT SELFADMINISTERED FORM 1
IN ENVELOPE AND SKIP
TO SECTION F, PAGE F-1) 2

SECTION F: CHILD AND FAMILY HEALTH.

FOR THIS SECTION YOU WILL NEED:

HAND CARD I

INTERVIEWER: HAS RESPONDENT HAD ANY BIOLOGICAL CHILDREN?

- INTERVAL SUPPLEMENTAL RECORDING BOOK (LS.R.B.)
- 1. Now I would like to ask you some questions about birth defects in your family. By birth defects I mean a physical abnormality present (though not necessarily noticed) at the time of birth. Birth defects range in severity from unusual birthmarks to a missing or mishapen limb. Birth defects can affect any part of the body, including bones, body organs such as kidneys or the heart, reproductive and respiratory systems, blood, and the skin.

29/ NO. . . (SKIP TO INSTRUCTION 12 1A. ARE CHILDREN RECORDED ON CHILDREN'S RECORD FORM? 30/ 1B. FOR EACH CHILD LISTED ON CHILDREN'S RECORD FORM ASK: Our records indicate that (READ CHILD'S NAME)(had/did not have) a birth defect at the time you were last interviewed. Is this information correct? YES, IF INFORMATION IS CORRECT. . . (GO TO Q.2, PAGE F-2) . . . 1 31/ NO, IF INFORMATION IS INCORRECT, UPDATE CHILDREN'S RECORD FORM, THEN GO TO Q.2, PAGE F-2 2 MISSING 8

- 2. CHILDREN'S RECORD FORM HAS INFORMATION FOR CHILDREN PREVIOUSLY REPORTED. THESE ARE CHILDREN BORN TO PARTICIPANT AS OF DATE OF LAST INTERVIEW.
 - FOR EACH CHILD ON RECORD FORM (EXCEPT CHILDREN WHO DIED <u>BEFORE DATE OF LAST INTERVIEW</u>), ASK:
- 2A-1. Has any new defect, impairment or cancer been identified in (READ CHILD'S NAME) since our last interview, that is, since (READ DATE OF LAST INTERVIEW)? RECORD ON CHILDREN'S RECORD FORM.
- 2A-2. IF DEFECTS, IMPAIRMENTS, OR CANCER EXISTS PREVIOUSLY ASK: Has any change occurred in the condition for previously existing defects, impairments, or cancer for (CHILD) since (DATE OF LAST INTERVIEW)? RECORD ON CHILDREN'S RECORD FORM.
 - IF NO NEW DEFECT, IMPAIRMENT, OR CANCER, AND NO CHANGE IN CONDITION FOR CHILD, REASK Q.2 AND Q.2A FOR EACH CHILD.
- 2B. SUPPLEMENTARY CHILDREN'S RECORD FORM HAS INFORMATION FOR CHILDREN BORN TO PARTICIPANT SINCE THE DATE OF LAST INTERVIEW.

FOR EACH CHILD ON SUPPLEMENTARY CR FORM, ASK:

Has a defect, impairment or cancer been identified in (READ CHILD'S NAME)?

RECORD ON SUPPLEMENTARY CHILDREN'S RECORD FORM.

3. ASK QUESTIONS 4-20 FOR EACH CHILD WITH CANCER, DEFECT, OR IMPAIRMENT OR ANY CHANGE IN PREVIOUS CONDITION(S), INCLUDING ALL WHO MAY HAVE DIED AFTER DATE OF LAST INTERVIEW.

IF NONE OF THE CHILDREN HAVE CANCER, A BIRTH DEFECT, OR IMPAIRMENT, SKIP TO INSTRUCTION BOX ABOVE Q.22.

| | 1ST CHILD | 2ND CHILD |
|---|--|--------------------------------|
| CHILD'S NAME: | | · |
| CHILD'S IDI | 32-33/ | 49-50/ |
| MOTHER'S ION | 34-35/ | 51-52/ |
| 4. Was (READ CHILD'S NAME) (ever/since/last interview) diagnosed as having cancer? | YES | YES |
| | YES NO | YES NO |
| 5. Was (CHILD) (ever/since last interview) diagnosed as having a (READ EACH CATEGORY). | Learning Disability | Learning Disability |
| | Mental Impairment | Impairment 2 56/ |
| 6. INTERVIEWER: HAS ANY CANCER, DEFECT OR IMPAIRMENT BEEN IDENTIFIED IN CHILD? CHECK CHILDREN'S RECORD FORM OR SUPPLEMENTAL FORM. IF YES, ASK Q.7. IF NO, ASK Q.6A. | 40-44/R YES(GO TO Q.7) 1 45/ NO(ASK Q.6A) 2 | NO (ASK Q.6A) 2 |
| 6A. INTERVIEWER: IS THERE ANOTHER CHILD? | YES (Q.4 AND 5 FOR NEXT CHILD) 1 46/ NO (SKIP TO BOX ABOUT Q.22) 2 | YES (Q.4 AND 5 FOR NEXT CHILD) |
| 7. What kind of birth defect or impairment (does/did) (CHILD) have? Any others? | 47/ | 64/ |
| Did you or someone else discuss (CHILD'S) birth defect or impairment with a doctor? | YES (GO TO Q.9) 1 48/ NO (SKIP TO Q.11) 2 | YES (GO TO Q.9) |

| 3RD CHILD | 4TH CHILD | 5TH CHILD | 6TH CHILD |
|---|---|--|--|
| 66-67/ | 14-15/ | 31-32/ | 48-49/ |
| 68-69/ | 16-17/ | 33-34/ | 50-51/ |
| YES | YES | YES | YES |
| YES NO Learning Disability 1 2 71/ Physical or Motor Impairment 1 2 72/ Mental Impairment 1 2 73/ | YES NO Learning Disability1 2 19/ Physical or Motor Impairment1 2 20/ Mental Impairment 1 2 21/ | YES NO Learning Disability1 2 36/ Physical or Motor Impairment1 2 37/ Mental Impairment1 2 38/ | YES NO Learning Disability1 2 53/ Physical or Motor Impairment1 2 54/ Mental Impairment1 2 55/ |
| BEGIN DECK 35 YES . (GO TO Q.7) 1 10/ NO (ASK Q.6A) 2 | YES . (GO TO Q.7) 1 27/ NO (ASK Q.6A) 2 | YES (GO TO Q.7) 1 44/ NO (ASK Q.6A) 2 | YES . (GO TO Q.7) 1 61/ NO (ASK Q.6A) 2 |
| YES . (Q.4 AND 5 FOR NEXT CHILD) 1 11/ NO (SKIP TO AND Q.22) 2 | YES . (Q.4 AND 5 FOR NEXT CHILD) 1 28/ NO (SKIP TO BOX AROME Q.22) 2 | YES (Q.4 AND 5 FOR NEXT CHILD) . 1 45/ NO (SKIP TO DESK ADDRESS Q.22) . 2 | YES . (Q.4 AND 5 FOR NEXT CHILD) 1 62/ NO (SKIP TO 55X ABOVE Q.22) 2 |
| 12/ YES . (GO TO Q.9) 1 13/ NO (SKIP TO Q.11) . 2 | 29/ YES (GO TO Q.9) . 1 30/ NO (SKIP TO Q.11) 2 | YES (GO TO Q.9) 1 47/ NO (SKIP TO Q.11) 2 | YES . (GO TO Q.9) 1 64/ NO (SKIP TO Q.11) . 2 |

| | 1ST CHILD | 2ND CHILD |
|---|---|--|
| CHILD'S NAME: | | |
| CHILD'S ID# | | |
| MOTHER'S ID# | | |
| 9. COMPLETE HEALTH CARE PROVIDER FORM FOR EACH CANCER, DISABILITY AND DEFECT. | COMPLETE HEALTH CARE PROVIDER FORM FOR EACH CANCER, DISABILITY AND DEFECT. 65/R | COMPLETE HEALTH CARE PROVIDER FORM FOR EACH CANCER, DISABILITY AND DEFECT. 71/R |
| IF NECESSARY, COMPLETE A MEDICAL AUTHORIZATION FORM | IF NECESSARY, COMPLETE A MEDICAL AUTHORIZATION FORM | IF NECESSARY, COMPLETE A MEDICAL AUTHORIZATION FORM |
| 10. Did the doctor say that (CHILD) need (s/ed) any testing, medication, treatment, surgery, or special equipment because of the birth defect or impairment? By special equipment I mean a wheelchair, walker, artificial limb, body brace(s), or crutches. | 66/ YES | 72/ YES |
| 11. Did (CHILD) ever receive any testing, medication, treatment, surgery or special equipment because of the birth defect or impairment? | 67/ YES | NO |
| 12. At any time, did (CHILD'S) birth defect or impairment interfere in any way with (CHILD'S) physical or social development? For example, getting a job or making friends? | NO (ASK Q.12A) | 74/ YES(GO TO Q.13) |
| 12A. INTERVIEWER: WAS THERE A "YES" CODED AT Q.10 OR Q.11? | YES (SKIP TO Q.13) 1 NO (ASK Q.12B) 2 70/ | YES (SKIP TO Q.13) 1 NO (ASK Q.12B) 2 76/ |
| 12B. INTERVIEWER: IS THERE ANOTHER CHILD? | YES (GO BACK TO Q.4 FOR NEXT CHILD) | YES (GO BACK TO Q.4 FOR NEXT CHILD) |
| · | NO (SKIP TO BOX ABOVE Q.22)2 | NO (SKIP TO BEX ABOUT Q.22) 2 |

| 3RD CHILD | 4TH CHILD | 5TH CHILD | 6TH CHILD |
|--|--|--|--|
| | · | | |
| | | | |
| | | | |
| COMPLETE HEALTH CARE PROVIDER FORM FOR EACH CANCER, DISABILITY AND DEFECT. | COMPLETE HEALTH CARE PROVIDER FORM FOR EACH CANCER, DISABILITY AND DEFECT. | COMPLETE HEALTH CARE PROVIDER FORM FOR EACH CANCER, DISABILITY AND DEFECT. | COMPLETE HEALTH CARE PROVIDER FORM FOR EACH CANCER, DISABILITY AND DEFECT. |
| IF NECESSARY, COMPLETE A MEDICAL AUTHORIZATION FORM |
| . 78/ | 14/ | 20/ | 26/ |
| YES 1 | YES 1 | YES 1 | YES 1 |
| NO 2 | NO 2 | NO 2 | NO 2 |
| DON'T KNOW 8 | DON'T KNOW8 | DON'T KNOW8 | DON'T KNOW 8 |
| 79/ YES 1 | 15/ YES 1 | YES 1 | 27/ YES 1 |
| NO 2 | NO 2 | NO 2 | NO 2 |
| DON'T KNOW 8 | DON'T KNOW8 | DON'T KNOW8 | DON'T KNOW 8 |
| BEGIN DECK 36 10/ YES(GO TO Q.13) 1 | 16/ YES(GO TO Q.13) . 1 | 22/ YES(GO TO Q.13) . 1 | 28/ YES(GO TO Q.13) . 1 |
| NO (ASK Q.12A) . 2 | NO (ASK Q.12A) 2 | NO (ASK Q.12A) 2 | NO (ASK Q.12A) 2 |
| DON'T KNOW 8 | DON'T KNOW8 | DON'T KNOW8 | DON'T KNOW 8 |
| 11/ YES (SKIP TO Q.13)1 | YES (SKIP TO Q.13) 1 | YES (SKIP TO Q.13) 1 | 29/ YES (SKIP TO Q.13) 1 |
| NO (ASK Q.12B) . 2 | NO (ASK Q.12B) 2 | NO (ASK Q.12B) 2 | NO (ASK Q.12B) 2 |
| YES (GO BACK TO Q.4 FOR NEXT CHILD) 1 | YES (GO BACK TO Q.4 FOR NEXT CHILD) 1 | YES (GO BACK TO Q.4 FOR NEXT CHILD) 1 | YES (GO BACK TO Q.4 FOR NEXT CHILD) 1 |
| NO (SKIP TO EXAMPLE Q.22) 2 | NO (SKIP TO DEX ABOUT Q.22) . 2 | NO (SKIP TO SEX ALEGE Q.22) . 2 | NO (SKIP TO BOX ABOVE Q.22) . 2 |

| | 1ST CHILD | 2ND CHILD |
|--|---|---|
| CHILD'S NAME: | | |
| CHILD'S ID# | | |
| MOTHER'S ID# | | |
| 13. Did (CHILD'S) doctor say that any of the birth defect(s) or impairments (was/were) life-threatening if left untreated? By untreated I mean if (CHILD) did not receive surgery, medication, a special diet, or some other medical intervention. | 31/ YES (ASK Q.13A) 1 NO (ASK Q.13A) 2 DON'T KNOW (ASK Q.13A) 8 | 37/ YES (ASK Q.13A) 1 NO (ASK Q.13A) 2 DON'T KNOW (ASK Q.13A) 8 |
| 13A. INTERVIEWER: IS CHILD UNDER TWO YEARS OLD OR DID CHILD DIE BEFORE HE OR SHE WAS TWO YEARS OLD? | YES SKIP TO Q.21, PAGE F-12 . 1 | YES SKIP TO Q.21, PAGE F-12 1 NO |
| 14. Did (CHILD) ever need help with eating, dressing, bathing, or using the toilet because of a birth defect or impairment? Help includes someone actually helping rather than just standing by to assist if needed. | 33/ YES | 39/ YES |
| 15. Because of a birth defect or impairment, did (CHILD) ever use or need any mechanical or need any mechanical or special aids such as a wheelchair, walker, body braces, artificial limbs, or crutches to carry out everyday activities? | 34/ YES | 40/ YES |
| 16. Was (CHILD) ever unable to take part at all in ordinary play with other children because of a birth defect or impairment? | 35/ YES (SKIP TO Q.17) 1 NO (ASK Q.16A) 2 | 41/ YES(SKIP TO Q.17) 1 NO(ASK Q.16A) 2 |
| 16A. Was (CHILD) ever limited in the kind or amount of play he/she could do because of his/her birth defect or impairment? | YES | YES |

| 3RD CHILD | 4TH CHILD | 5TH CHILD | 6TH CHILD |
|------------------------------|----------------------------------|--------------------------------|-----------------------------------|
| | | | |
| | | , L.J. | |
| | | | |
| 43/ YES(ASK Q.13A) . 1 | 49/ YES(ASK Q.13A) 1 | 55/ YES(ASK Q.13A) 1 | 61/ YES(ASK Q.13A) 1 |
| NO (ASK Q.13A) . 2 | NO (ASK Q.13A) 2 | NO (ASK Q.13A) 2 | NO (ASK Q.13A) 2 |
| DON'T KNOW(ASK Q.13A) . 8 | DON'T KNOW (ASK Q.13A) . 8 | DON'T KNOW (ASK Q.13A) . 8 | DON'T KNOW (ASK Q.13A) 8 |
| YES. SKIP TO Q.21, PAGE F-12 | YES SKIP TO Q.21, PAGE F-12 1 | YES SKIP TO Q.21, PAGE F-12 | YES. SKIP TO Q.21, 1 PAGE F-12 |
| NO 2 | NO 2 | NÓ 2 | NO |
| 45/ | 91/ YES 1 | 9// YES 1 | ω, YES |
| YES 1 | NO 2 | NO 2 | NO 2 |
| NO 2 | NO2 | 10 | 10 |
| 46/ | 52/ | 58/ | 64/ |
| YES 1 | YES 1 | YES 1 | YES 1 |
| NO 2 | NO 2 | NO 2 | NO 2 |
| | | | |
| 47/ YES(SKIP TO Q.17)1 | 53/ YES(SKIP TO Q.17) 1 | 59/ YES(SKIP TO Q.17) 1 | 65/ YES(SKIP TO Q.17) . 1 |
| NO (ASK Q.16A) . 2 | NO (ASK Q.16A) 2 | NO (ASK Q.16A) 2 | NO(ASK Q.16A) 2 |
| 48/ YES 1 | 54/ YES 1 | 60/ YES 1 | 66/ YES 1 |
| NO 2 | NO 2 | NO 2 | NO 2 |

| | | 1ST CHILD | 2ND CHILD |
|---|--|---|---|
| CHILD'S NAME: | | | |
| CHILD'S ID# | | | |
| MOTHER'S IDM | | | |
| 17. Did (CHILD'S) b impairment ever from going to so | keep (him/her) | YES (SKIP TO Q.18) 1 | 75/ YES (SKIP TO Q.18) 1 |
| | er have to go to a school, or be in a cause of (his/her) | NO (ASK Q.17A) 2 68/ YES (SKIP TO Q.18) 1 | NO (ASK Q.17A) 2 76/ YES (SKIP TO Q.18) 1 |
| birth defect or in | • | NO (ASK Q.17B) 2 | NO (ASK Q.17B) 2 |
| 17B. Was (CHILD) ev school attendand able to learn bed | | YES | |
| birth defect or in | • | NO 2 | NO 2 |
| 18. Because of (his/ or impairment di need a lot more children (his/her) outside, getting t to the store, and activities like tha | d (CHILD) ever help than other age in going o school, going other everyday | 70/ YES | |
| 19. Because of a bir impairment, did (need the help of for everyday actitaking care of the doing the laundry | CHILD) ever another person vities such as e house or yard, | 71/ YES | NO 2 |
| meals? | | | BEGIN DECK 37 |
| 20. Will/Would (CHIL (keep/have kept) working on a job | (him/her) from | 72/ YES (SKIP TO Q.21) 1 | 10/ YES (SKIP TO Q.21) 1 |
| wonang on a job | ioi puj i | NO (ASK Q.20A) 2 73/ | NO (ASK Q.20A) 2 |
| 20A. Will/Would (CHIL | | YES (SKIP TO Q.21) 1 | YES (SKIP TO Q.21) 1 |
| been) limited in the kind of work (he/she) could (do/have done) because of (his/her) birth defect? | | NO (ASK Q.20B) 2 | NO (ASK Q.20B) 2 |
| 20B. Will/Would (CHIL been) limited in t work (he/she) co done) because o defect? | he amount of uld (do/have | YES | YES |

| 13/ YES(SKIP TO Q.18) 1 YES(SKIP TO Q.18) 1 YES(SKIP TO Q.18) 1 YES(SKIP TO | 37/ Q.18) . 1 |
|---|------------------|
| NO (ASK Q.17A) 2 NO (ASK Q.17A) 2 NO (ASK Q.17A) 2 NO (ASK Q.17A) 2 30/ YES (SKIP TO Q.18) 1 | 38/ |
| NO (ASK Q.17B) 2 NO (ASK Q.17B) 2 NO (ASK Q.17B) | |
| YES | 39/ 1 |
| NO | 2 |
| 16/ 24/ 32/ | 40/ |
| YES 1 YES 1 YES 1 YES | 1 |
| NO | 2 |
| 17/ YES | 41/ |
| NO | 2 |
| | |
| 18/ YES(SKIP TO Q.21) 1 YES(SKIP TO Q.21) 1 YES(SKIP TO Q.21) 1 YES (SKIP TO | 42/ Q.21) 1 |
| NO (ASK Q.20A) . 2 NO (ASK Q.20A) . 2 NO (ASK Q.20A) . 2 NO (ASK Q.20A) . 35/ | 0A) 2 43/ |
| YES(SKIP TO Q.21) 1 YES(SKIP TO Q.21) 1 YES(SKIP TO Q.21) 1 YES (SKIP TO | |
| NO(ASK Q.20B) | :0B) 2 |
| YES | 44/ 1 |
| NO | 2 |

| | | 1ST CHILD | 2ND CHILD |
|-------------|--|---|---|
| e | HLD'S NAME: | | |
| Cł | (ILD'S ID# | | |
| M | OTHER'S ID# | | |
| 21 | RESPONDENT HAVE ANOTHER | YES. (GO BACK TO Q.4 FOR NEXT CHILD) 1 | 46/ YES (GO BACK TO Q.4 FOR NEXT CHILD) 1 |
| | CHILD WITH CONDITIONS? | NO (SKIP TO SEEX | NO (SKIP TO BOX ABOVE Q.22) 2 |
| 22. 22A. | | Q.22A) | |
| | | | |
| | | | 48/ |
| 23. | Do you have any biological brothers or sis age of 1. | sters? Include any brothers or sist | ers who may have died before |
| | YES (ASK | Q.24, PAGE F-14) | . 1 49/ |
| | NO (SKIP | TO Q.25, PAGE F-14) | . 2 |
| | DON'T KNOW (SKIP | TO 0.25 PAGE F-14) | . 8 |

| 3RD CHILD | ATH CHILD | 5TH CHILD | 6TH CHILD |
|---|---|---|----------------------------|
| | | | |
| | | | |
| 50/ YES (GO BACK TO Q.4 FOR NEXT CHILD) 1 | 51/ YES (GO BACK TO Q.4 FOR NEXT CHILD) 1 | 52/ YES (GO BACK TO Q.4 FOR NEXT CHILD) 1 | 53/ YES (NEW QUEX) 1 |
| NO(SKIP TO DEEX ABSENCE Q.22) 2 | NO (SKIP TO PEX ABOVE Q.22) 2 | NO (SKIP TO DEX ABOVE Q.22) 2 | NO (SKIP TO BOX Q.22) 2 |

| Heal | h Interval Questionnaire | | | |
|-------------|--|--|---|-------------------------------|
| 24. | Did any of your biolog | ical brothers or sisters ev | ver have a birth defect? | |
| - 7. | | | A) 1 | 54/ |
| | | | 2.25) | |
| | | | ().25) | |
| | | | | |
| 24A. | | ir brothers, sisters, or bo | | 55/ |
| | | | | 3 5/ |
| | | | | |
| | вотн | | | |
| FOR EA | CH SIBLING WITH A BIR . Was this sibling a half (| TH DEFECT, ASK: Who (brother/sister) or a full (b | at kind of birth defect did your (broth prother/sister)? RECORD BELOW. | ner/sister) have? RECORD |
| | SIBLING 1 | | 56/ SIBLING 2 | 58/ |
| | DEFECT | | DEFECT: | |
| | DE: 2011 | | | |
| | | | 57/ | 59/ |
| | HALF (BROTHE | ER/SISTER) | . 1 HALF (BROTHER/SISTER) | 1 |
| | FULL (BROTHE | R/SISTER) | . 2 FULL (BROTHER/SISTER) | 2 |
| | SIBLING 3 | | 60/ SIBLING 4 | 62/ |
| | DEFECT: | | DEFECT: | |
| | DE. 2011 | | | |
| | | | 61/ | 63/ |
| | HALF (BROTHE | ER/SISTER) | . 1 HALF (BROTHER/SISTER) | |
| | FULL (BROTHE | R/SISTER) | . 2 FULL (BROTHER/SISTER) | 2 |
| 25. | Now I would like to as | k you some questions at | out your biological parents. Did eit | her your biological mother or |
| | biological father ever h | ave a birth defect? | | • |
| | | | 26) 1 | 64/ |
| | NO | (SKIP TO C |).28, PAGE F-15) 2 | |
| | DON'T | KNOW (SKIP TO C |).28, PAGE F-15) 8 | |
| 26. | Which parent had a bi | rth defect? | | |
| | MOTHE | R ONLY | | 65/ |
| • | FATHE | R ONLY | | |
| | | | | |
| 27. | What kind of birth defe | ect did your (PARENT) ha | ave? | |
| - 1. | | | | |

B-88

May 15, 1992 16:03 pm Field Version 1.1

SKIP TO Q.IS 18 IN

Page F-15

| | I.S.R.B. ON PAGE 5. | · |
|---------------|---|--------------------------------|
| 28. | Now there are some questions about death in your family. Has anyone near to yo | ou died in the last 12 months? |
| · | YES 1 | 68/ |
| | NO (SKIP TO SECTION G) 2 | • |
| 26 A . | SHOW PARTICIPANT HAND CARD I. What was the person's relationship to you apply from the card. CODE ALL THAT APPLY. | ? Please choose as many as |
| | A. CHILD | 69-70/ |
| | B. PARENT 02 | 71-72/ |
| | C. SPOUSE/PARTNER | 73-74/ |
| | D. BROTHER OR SISTER | 75-76/ |
| | E. OTHER NEAR RELATIVE OF YOU OR YOUR SPOUSE/PARTNER 05 | 77-78/ |
| | F. FRIEND | 79-80/ |
| | G. OTHER (SPECIFY) | BEGIN DECK 38 |
| | 07 | 10-11/ |
| 28B. | What (was the date/were the dates) of the death(s)? What month and year? (ENTER DATES OF DEATH IN SAME ORDER AS CIRCLED CODES.) | • |
| | ENTER MONTH AND YEAR - | 12-15/ |
| | ENTER MONTH AND YEAR _ _ _ | 16-19/ |
| | ENTER MONTH AND YEAR | 20-23/ |

| : | | ••••• | | **** | | | | 90000 | | | | |
|---|---|-------|---|------|-----|-----|------|-------|---------|--------|----------|--------|
| ٠ | - | | | - | 4.0 | | W a | 2000 | 9000 X | | % 555∞ o | * * 3 |
| 2 | • | - | | | | | | - | 8885 xo | ٠ مساد | 9 2005 1 | 3 - 3 |
| ı | • | | • | | • | دند | 88.0 | 2000 | 888 AL | مستند | | . 7 7. |
| | | | | | | | | | | | | |

FOR THIS SECTION YOU WILL NEED:

- HAND CARDS J L
- HAND CARD N Q
- SELF ADMINISTERED FORM 2
- · INTERVAL SUPPLEMENTAL RECORDING BOOK(I.S.R.B.)

| 1. | Now let's talk about health. (READ CHOICES)? | Compared to other people your age, would you say that your health is | i |
|----|--|--|----------|
| | Exc | elient | 24/ |
| | Goo | od2 | |
| | Fair | 3 | |
| | Poo | r4 | |
| 2. | Since (DATE OF LAST INTE | RVIEW) have you had acne on your face, chest or back? | |
| | YES | 3 | 25/ |
| | NO | | |
| 3. | During what year, between (chest or back? | DATE OF LAST INTERVIEW) and now, did you last have acne on you | ır face, |
| | REC | CORD YEAR: 19 | 26-27/ |

4. Think about the [first/next] time you had acne on your face, chest or back between (DATE OF LAST INTERVIEW) and now. When did it start and until when did it last? (PROBE FOR ALL PERIODS OF TIME.)

| FIRST | SECOND | THIRD |
|-------|-----------------------------|-------|
| | - 36-39/ MONTH YEAR | |
| то | то | то |
| | _ - 40-43/ MONTH YEAR | |

4A. ASK Q.4A FOR EACH TIME IN Q.4. SHOW RESPONDENT HAND CARD J. Where was the acne located [the (first/next) time]?

CIRCLE "YES" OR "NO."

| | RST ES | TIME NO | | SECOND TIME YES NO | | THIRD TIME YES NO | |
|--------------------|-----------|------------|-----|-----------------------|-----|----------------------|-----|
| | | | | | | | |
| TEMPLES | 1 . | 2 | 52/ | 1 2 | 61/ | 1 2 | 70/ |
| EYES OR EYELIDS | 1 . | 2 | 53/ | 1 2 | 62/ | 1 2 | 71/ |
| EARS | 1 . | 2 | 54/ | 1 2 | 63/ | 12 | 72/ |
| CHEEKS | 1 . | 2 | 55/ | 12 | 64/ | 1 2 | 73/ |
| NOSE | 1 | 2 | 56/ | 12 | 65/ | 1 . 2 | 74/ |
| FOREHEAD | 1 | 2 | 57/ | 12 | 66/ | 1 . 2 | 75/ |
| JAW, CHIN OTHER | 1 | 2 | 58/ | 1 2 | 67/ | 1 . 2 | 76/ |
| CHEST | 1 , . | 2 | 59/ | 12 | 68/ | 1 . 2 | 77/ |
| BACK | 1 | 2 | 60/ | 12 | 69/ | 1 . 2 | 78/ |

| 5. | IF TEMPLES, EYES, EYELIDS, OR EARS <u>NOT</u> CIRCLED IN Q.4A, SKIP TO Q.9, P OTHERWISE ASK: Between (DATE OF LAST INTERVIEW) and now, did you ever medical facility about the acne on your (temples/eyes or eyelids/ears)? | AGE G-5. consult a doctor or |
|----|---|---------------------------------|
| | YES | . 1 79/ |
| | NO (SKIP TO Q.9, PAGE G-5) | . 2 |
| 6. | What month and year did you first consult a doctor about the acne on your (temples/ | eyes or eyelids/ears)? |
| | MONTH YEAR | BEGIN DECK 39 10-13/ |

| 6A. | What is the full name of the the diagnosis was made? | doctor who made th | e diagnosis or the nar | me of the medical facility where |
|----------------|--|-----------------------------------|---------------------------------------|--|
| | COMPLETE MEDICAL AUT | HORIZATION FORM | A, IF NECESSARY. | |
| | PHYSICIAN'S LAST | NAME | | |
| | FIRST NAME | | | |
| | OR | | | |
| | FACILITY NAME | | : | |
| INSTRU | ICTIONS FOR MEDICAL AU | THORIZATION FOR | MS: | |
| | UST COMPLETE AN AUTHO ARTICIPANT. | RIZATION FORM FO |)R EACH PHYSICIAN | OR FACILITY NAMED BY |
| IF THE | PARTICIPANT SEES THE TIONS, YOU COMPLETE ON | SAME PROVIDER IE AUTHORIZATION | (PHYSICIAN OR FA I FORM FOR THE SA | ACILITY) FOR SEVERAL IME PROVIDER FORM. |
| LIST E | ACH INDIVIDUAL CONDITION | N ON THE SAME P | ROVIDER FORM. | |
| 6B. | What is the address of that | (doctor/medical facili | ty)? | |
| | | | | 14/ |
| | STREET ADDRESS | | | |
| | CITY | | (STATE) | |
| 7. Wh a | t month and year did you <u>last</u> | consult a doctor ab | out the acne on your (| (temples/eyes or eyelids/ears)? |
| | - | MONTH - L | YEAR | 15-18/ |
| | | B-9 | 4 | |
| May 15, 1 | 992 | 16:10 pm | F | ield Version 1.1 |

| IF THE NAME | e name of the doctor or medical facility you consulted at that time? E OF THE PROVIDER IS THE SAME AS IN Q.6A, ME PROVIDER AS IN Q.6A." | |
|---------------------|---|-----|
| PHYS | CICIANS LAST NAME | |
| FIR | ST NAME | |
| 0 | PR | |
| FAC | CILITY NAME | |
| BB. What is the add | dress of that (doctor/medical facility)? | |
| STREET ADD | RESS | |
| | | |
| CITY | ` , | |
| 9. WAS R INTER | VIEWED IN 1985/1986 OR 1987/1988? SEE INFORMATION SHEET. | |
| | YES (SKIP TO Q.11, PAGE G-6)1 | |
| | NO 2 | |
| 10. SHOW RESPO | ONDENT HAND CARD K. What is your blood type? | |
| | A1 | 19/ |
| | В2 | |
| | 03 | |
| | AB4 | |
| | DON'T KNOW | |
| 10A. Is that pos | sitive or negative? | |
| | POSITIVE 1 | 20/ |
| | NEGATIVE2 | |
| | B-95 | *. |

| 11. | ASK ALL RESPONDENTS. SHOW RESPONDENT HAND CARD L. During the last year, average, would you say you use aspirin? | now onen, on |
|-----|---|-------------------------|
| | More than 4 aspirin a day1 | 21/ |
| | 4 aspirin a day (2 doses a day)2 | |
| | 2 aspirin a day (1 dose a day)3 | |
| | 6-8 aspirin a week (1 dose, 3-4 days/week) | |
| | 4 aspirin a week or less | |
| | NONE | |
| 12. | In the summer, once you have already been in the sun several times, what reaction will you next time you go out in the sun for two or more hours on a bright day? Would you say you | ır skin have the get |
| | A painful burn? 1 | 22/ |
| | A burn? 2 | |
| | Some redness only? | |
| | Or no reaction? | |
| 13. | SHOW RESPONDENT HAND CARD N. After repeated sun exposures, for example, a two outdoors, will your skin become | week vacation |
| | Only freckled or no suntan at all? | 23/ |
| | Only mildly tanned due to a tendency to peel?2 | |
| | Moderately tanned? | |
| | Very brown and deeply tanned? 4 | ٠ |
| | | |

| WA | SR | INTERVIEWED IN 1 | 1985/1986 OR 1987/1988? SEE INFORMATION SHEET. | |
|-----|-------------|--|---|-------------|
| | | | YES (SKIP TO Q.15, BELOW) | |
| | | | NO2 | |
| 14. | VOL | were born. Please birth. Please take | IISTERED FORM 2. We would like you to tell us all the places you've live list all the places you've lived for more than 12 months starting with the e your time. It will probably take you 10 minutes or so to fill out this form | tirst place |
| 15. | Sind | ce (DATE OF LAST I a peptic or stomack | INTERVIEW)/(During any period in your life), did a doctor (ever) tell you h ulcer? | that you |
| | | | Yes (GO TO Q.16) | 24/ |
| | | | No | |
| 16. | Dur | ing what month and | I year did a doctor first tell you that you had a peptic or stomach ulcer? | |
| | | • | MONTH YEAR | 25-28/ |
| 17. | Wha diag | at is the full name of gnosis was made? (| of the doctor who made the diagnosis or the name of the medical facility of the MEDICAL AUTHORIZATION FORM. | vhere the |
| | | PHYSICIAN'S L | AST NAME | |
| | | FIRST NAME | | |
| | | OR | | |
| | | FACILITY NAI | ME | |
| | Α. | What is the addres | ss of that (doctor/medical facility)? | |
| | | STREET ADDRES | is | |
| | | CITY | (STATE) | |

| 400 | 10 Ai | r Forms Hookh Chich (44FC2) | DECK 39 |
|-----|-------|--|--------------|
| | | ir Force Health Study (#4563) Interval Questionnaire | Page G-8 |
| 18. | Do | you have a peptic or stomach ulcer now? | |
| | | YES1 | 29/ |
| | | NO 2 | |
| 19. | Wh | nat month and year did you last consult a doctor for your peptic or stomach ulcer? | |
| | | MONTH YEAR | 30-33/ |
| | A. | Was this the same doctor that had originally diagnosed the stomach ulcer for the first time? | |
| | | YES (SKIP TO Q.20, BELOW) 1 | |
| | | NO | |
| | В. | What is the full name of the doctor or the name of the medical facility you <u>last consulted for</u> or stomach ulcer? COMPLETE MEDICAL AUTHORIZATION FORM. | your peptic |
| | | PHYSICIANS LAST NAME | |
| | | FIRST NAME | |
| | | OR | |
| | | FACILITY NAME | |
| | C. | What is the address of that doctor/medical facility)? | |
| | | STREET ADDRESS | |
| | | | |
| | | CITY (STATE) | |
| 20. | Sino | ce (DATE OF LAST INTERVIEW) have you/(Have you <u>ever</u> during any period in your life) had er? | l a bleeding |
| | | YES1 | 34/ |
| | | NO | |
| | | SKIP TO Q-27, PAGE G-11) | |

B-98

16:10 pm

Field Version 1.1

| | • |
|-------------|--|
| 21. | During what month and year did a doctor first tell you that you had a bleeding ulcer? |
| | MONTH YEAR 35-38 |
| 22 . | What is the full name of the doctor who made the diagnosis or the medical facility where the diagnosis was made? |
| | IF NAME OF THE PROVIDER IS THE SAME AS IN Q.17, WRITE: "SAME PROVIDER AS IN Q.17." |
| | PHYSICIAN'S LAST NAME |
| | FIRST NAME |
| | OR |
| | FACILITY NAME |
| 23. | What is the address of that (doctor/medical facility)? |
| | STREET ADDRESS |
| | CITY (STATE) |
| 24. | What month and year did you last consult a doctor for your bleeding ulcer? |
| | MONTH YEAR 39-42 |
| | A. Was this the same doctor that had originally diagnosed the stomach ulcer for the first time? |
| | YES (SKIP TO Q.25, NEXT PAGE) 1 |
| | NO 2 |
| | |

| В. | What is the full name ulcer? | of the doctor or the name of the i | medical facility you last consulted for you ble |
|------------------|---|------------------------------------|---|
| | COMPLETE MEDICA | L AUTHORIZATION FORM. | |
| | PHYSICIAN'S | LAST NAME | |
| | FIRST NA | ME | |
| | OR | | |
| | FACILITY N | AME | |
| C. | What is the address o | f that doctor/medical facility)? | |
| | STREET ADDRESS | | |
| | CITY | | (STATE) |
| 6. Durii | | year(s) did you have a bleeding u | |
| | FROM _j- <u> _ j 43-46</u> / | FROM | FROM |
| | _I- []43-46/ TH YEAR | MONTH YEAR | L_ _ - 59-62/ MONTH YEAR |
| | то | то | ТО |
| | _ - <u> </u> 47-50/ Th year | - 55-58/ MONTH YEAR | MONTH YEAR |
| | | B-100 | , |
| 45 | 1992 | 16:10 pm | Field Version 1.1 |

| 27. | FOR PARTICIPANTS INTERVIEWED IN 1985/1986 OR 1987/1988 READ "SINCE DATE INTERVIEW. Since (DATE OF LAST INTERVIEW) have you been/(Were you ever during life) hospitalized for your peptic or stomach ulcer? | |
|-----|--|----------------------|
| • | YES 1 | 67/ |
| | NO 2 | |
| 28. | Since (DATE OF LAST INTERVIEW) did you have/(Have you ever during any period in your peptic or stomach ulcer? | ur life had) surgery |
| | YES1 | 68/ |
| | NO 2 | • |
| 29. | Are you currently taking any prescribed medicines for your peptic or stomach ulcer? | |
| | YES1 | 69/ |
| | NO (SKIP TO Q.30, BELOW) | |
| | A. What are the names of the medicines you are taking? (PROBE: WHAT OTHERS?) | |
| | 1) | |
| | 2) | |
| | 3) | |
| | SHOW RESPONDENT HAND CARD O. Please indicate which of the following members of family have ever had a peptic or stomach ulcer? | of your biological |
| | 1. Mother | 70-71/ |
| | 2. Father02 | 72-73/ |
| | 3. Full Brother | 74-75/ |
| | 4. Half Brother | 76-77/ |
| | 5. Full Sister | 78-79/ |
| | | BEGIN DECK 40 |
| | 6. Half Sister | 10-11/ |
| | 7. NONE07 | 12-13/ |
| | 8. DON'T KNOW98 | 14-15/ |

| De vou boue es bou | es very magnific had abore unpar etermach pain? | |
|----------------------|---|------|
| . Do you nave or nav | re you recently had sharp upper stornach pain? | 16 |
| | YES1 | . 10 |
| | NO (SKIP TO Q.34, BELOW) 2 | |
| Was this pain reliev | red by food, milk, or antacids? | |
| | YES1 | 17 |
| | NO 2 | |
| Has this stomach pa | ain awakened you from sleep? | |
| | YES1 | 18 |
| | NO 2 | |
| Have you vomited b | | |
| | YES 1 | 19 |
| | NO 2 | |
| Have you recently e | experienced dark tar colored stools or bowel movements? | |
| | YES1 | 20 |
| | NO | |

THIS PAGE INTENTIONALLY BLANK

Now I would like to ask you some questions that deal only with the period of time between (DATE OF LAST INTERVIEW) and now. (IF NEW PARTICIPANT OR ONLY THE BASELINE COMPLETED: REFERENCE DATE IS: Between January 1, 1983 and now.)

INTERVIEWER: ASK A THROUGH G FOR EACH CONDITION CODED YES.

| | | Α | В |
|---|--|--|---|
| Since (DATE OF LAST INTERVIEW) has a doctor told you for the first time that you had? | | Between (DATE OF LAST INTERVIEW) and now, in what month and year did a doctor first tell you that you had (CONDITION)? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? REVIEW MEDICAL AUTHORIZATION FORMS. IF FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM NOW. |
| 36. Diabetes? | YES 1 (SKIP TO O.IS25 in I.S.R.B on page 7) NO 21/ | MONTH YEAR 22-25/ | PHYSICIAN'S LAST NAME FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| 37. Thyroid problems? (SPECIFY) | YES | L_L-L_ Month Year 29-32/ | PHYSICIAN'S LAST NAME STREET ADDRESS CITY STATE |

| С | D | E | F | G |
|---------------------------------|---|---|--|--|
| Do you have (CONDITION) now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did you last consult a doctor for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility <u>you last consulted?</u> IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES | YES | 36-38/2)36-38/39-41/3)42-44/ | L_ - - MONTH YEAR 45-48/ | PHYSICIAN'S LAST NAME 49/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE INTERVIEWER: BEFORE ASKING ABOUT THYROID PROBLEMS, SKIP TO Q.IS25 IN I.S.R.B. PAGE 7. |
| YES | YES | 1) | MONTH YEBASAV | PHYSICIAN'S LAST NAME 65/ FIRST NAME OR FACILITY NAME STREET ADDRESS LILL CITY STATE |

| ⊸ ., | | A | В |
|---|-----|---|---|
| Since (DATE OF LAST INTERVIEW) has a doctor told you for the first time that you had? | | Between (DATE OF LAST INTERVIEW) and now, in what month and year <u>did a doctor first tell</u> you that you had (CONDITION)? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? REVIEW MEDICAL AUTHORIZATION FORMS. IF FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM NOW. |
| 38. Anemia? | YES | MONTH YEAR 67-70/ | PHYSICIAN'S LAST NAME 71/ FIRST NAME OR FACILITY NAME |
| | | · | CITY STATE |
| 39. A heart condition? (SPECIFY) | YES | MONTH YEAR 74-77/ | PHYSICIAN'S LAST NAME 78/ FIRST NAME |
| 73/ | | | FACILITY NAME |
| | | | STREET ADDRESS |
| | | | CITY STATE |

| С | D | E | F | G |
|---------------------------------|---|---|---|---|
| Do you have (CONDITION) now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did you last consult a doctor for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility <u>you last consulted?</u> IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES | YES | 1) | - MONTH YEAR 21-24/ | PHYSICIAN'S LAST NAME 25/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| YES | YES | 28-30/ 2)31-33/ 3)34-36/ | _ - MONTH YEAR 37-40/ | PHYSICIAN'S LAST NAME 41/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| - - | | A | В |
|---|-----|---|---|
| Since (DATE OF LAST INTERVIEW) has a doctor told you for the first time that you had? | | Between (DATE OF LAST INTERVIEW) and now, in what month and year <u>did a doctor first tell</u> you that you had (CONDITION)? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? IF AUTHORIZATION FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM. |
| 40. An enlarged liver? | YES | MONTH YEAR 43-46/ | PHYSICIAN'S LAST NAME FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| 41. Jaundice? (SPECIFY) | YES | MONTH YEAR 49-52/ | PHYSICIAN'S LAST NAME 53/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| С | D | E | F | G |
|---------------------------------|---|---|--|--|
| Do you have (CONDITION) now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did you last consult a doctor for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility you last consulted? IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES | YES | 1) | MONTH YEAR 65-68/ BEGIN DECK 42 | PHYSICIAN'S LAST NAME FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| YES | YES | 1) | MONTH YEAR 10-13/ | PHYSICIAN'S LAST NAME FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| | | A | В |
|---|-----|--|---|
| Since (DATE OF LAST INTERVIEW) has a doctor told you for the first time that you had? | | Between (DATE OF LAST INTERVIEW) and now, in what month and year <u>did a</u> <u>doctor first</u> tell you that you had (CONDITION)? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? IF AUTHORIZATION FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM. |
| 42. Hepatitis? | YES | _ - _ MONTH YEAR 16-19/ | PHYSICIAN'S LAST NAME PHYSICIAN'S LAST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| 43. Cirrhosis of the liver? ("SIR-O-SIS") | YES | MONTH YEAR 22-25/ | PHYSICIAN'S LAST NAME 26/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| С | D | E | F | G |
|---------------------------------|---|---|--|---|
| Do you have (CONDITION) now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did you last consult a doctor for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility <u>you</u> last consulted? IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES 1 NO 2 27/ | YES | 1) | L_L-L_I MONTH YEAR 38-41/ | PHYSICIAN'S LAST NAME 42/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| YES | YES | 1) | MONTH YEAR 54-57/ | PHYSICIAN'S LAST NAME 58/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| | - : . | | A | В |
|---|------------------------|-----|---|---|
| Since (DATE OF LAST INTERVIEW) has a doctor told you for the first time that you had? | | | Between (DATE OF LAST INTERVIEW) and now, in what month and year <u>did a doctor first tell</u> you that you had (CONDITION)? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? IF AUTHORIZATION FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM. |
| 44. | Intestinal parasites? | YES | MONTH YEAR 60-63/ | PHYSICIAN'S LAST NAME 64/ FIRST NAME OR FACILITY NAME |
| | | | | STREET ADDRESS CITY STATE |
| 45 . | Gall bladder problems? | YES | MONTH YEAR 66-69/ | PHYSICIAN'S LAST NAME 70/ FIRST NAME OR |
| · | | | | STREET ADDRESS CITY STATE |

| С | D | E | F | G |
|---------------------------------|---|---|--|--|
| Do you have (CONDITION) now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did you last consult a doctor for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility you last consulted? IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES 1 NO 2 71/ | YES | 73-75/ 2) | MONTH YEAR 13-16/ | PHYSICIAN'S LAST NAME 17/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| YES 1 NO 2 18/ | YES | 20-22/ 2) | _ - MONTH YEAR 29-32/ | PHYSICIAN'S LAST NAME 33/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| | ÷., | | A . | В |
|-----------------|--|------------------------------|---|---|
| Since told y | (DATE OF LAST INTE ou for the first time that | RVIEW) has a doctor you had? | Between (DATE OF LAST INTERVIEW) and now, in what month and year <u>did a doctor first tell</u> you that you had (CONDITION)? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? IF AUTHORIZATION FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM. |
| 46. | Any other liver condition? (SPECIFY) | YES | MONTH YEAR 36-39/ | PHYSICIAN'S LAST NAME 40/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| 47. | Pneumonia? | YES | MONTH YEAR 42-45/ | PHYSICIAN'S LAST NAME FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| С | D | E | F | G |
|---------------------------------|---|---|--|--|
| Do you have (CONDITION) now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did you last consult a doctor for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility you last consulted? IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES | YES | 1) | - _ MONTH YEAR 58-61/ | FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| YES | YES | 1) | L - MONTH YEAR 74-77/ | PHYSICIAN'S LAST NAME 78/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| | | | A | В |
|-----|---|---------------------------------------|---|---|
| | (DATE OF LAST INTE ou for the first time that | | Between (DATE OF LAST INTERVIEW) and now, in what month and year <u>did a doctor first tell</u> you that you had (CONDITION)? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? IF AUTHORIZATION FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM. |
| 48. | A respiratory condition other than pneumonia? (SPECIFY) | YES 1 NO. (SKIP TO O.49 BELOW) 2 10/ | MONTH YEAR 12-15/ | PHYSICIAN'S LAST NAME 16/ FIRST NAME OR FACILITY NAME STREET ADDRESS LILL CITY STATE |
| 49. | Any other major condition? (SPECIFY) | YES 1 NO (SKIP TO | MONTH YEAR 19-22/ | PHYSICIAN'S LAST NAME FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| С | D | Е | F | G |
|---------------------------------|---|---|--|--|
| Do you have (CONDITION) now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did you last consult a doctor for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility you last consulted? IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES 1 NO 2 24/ | YES | 26-28/ 2): | MONTH YEAR 35-38/ | PHYSICIAN'S LAST NAME 39/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| YES | YES | 1) | MONTH YEAR 51-54/ | PHYSICIAN'S LAST NAME 55/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| . | | | В |
|---|---|--|---|
| | | Between (DATE OF LAST INTERVIEW) and now, in what month and year <u>did a</u> doctor first tell you that you had a condition which needed treatment? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? IF AUTHORIZATION FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM. |
| 50. Since (DATE OF LAST INTERVIEW), have you been treated for a mental or emotional disorder whether you were hospitalized or treated as an outpatient. (SPECIFY) | YES 1 (SKIP TO Q.IS.50 in I.S.R.B Page 12) NO | L_L- -L_L MONTH YEAR 58-61/ | PHYSICIAN'S LAST NAME 62/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| c | D | E | F | G |
|-------------------------------------|---|---|--|--|
| Do you have emotional disorder now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did you last consult a doctor for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility you last consulted? IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES 1 | YES 1 | 1) | <u> </u> | |
| NO | NO(SKIP TO F FOR THIS | | MONTH YEAR 65-68/ | PHYSICIAN'S LAST NAME |
| | CONDITION) 2 64/ | 2) | | FIRST NAME OR |
| | | 3) | | FACILITY NAME |
| ' | | · | | STREET ADDRESS |
| | | | | CITY STATE |

BEFORE ASKING Q.51, SKIP TO Q.850 in LS.R.B. on PAGE 12.

| 51. At any time si | nce (DATE OF LAST INTER | RVIEW) has a docte | or told you that you had cancer? | |
|--------------------|--|---------------------|---|---------|
| | | | • | 69/ |
| | YES | | 1 37 | 00/ |
| | NO | (SKIP TO Q. | 55, PAGE G- 39)2 | |
| | | • | | |
| 52. Did the doctor | r tell you that this was a skir | n cancer or a syste | mic (body) cancer? | |
| | SKIN CANCER | ONLY | 1 | 70/ |
| | SYSTEMIC CAN | CER ONLY (SKIP | TO Q.54, PAGE G-34) 2 | |
| · | BOTH SKIN AND | SYSTEMIC CAN | CER3 | |
| | | | | |
| | • | SKIN CANCER ON | LY | ` |
| 53. SHOW RESPo | | Please look at this | chart and tell me where each of you | ır skin |
| INDICATE TH | IE ANATOMICAL CODE FO | R EACH SITE BEI | NG REPORTED. | |
| | | SITE NUMBER | | |
| | | _ | | |
| | 1 | 2 | 3 | |
| | <u> </u> | 73-74/ | 75-76/ | |
| | 71-72 | 73-747 | 7 3 -7 0 | |
| | | SITE CODE | | |
| CODES: (01) | Scalp or Forehead | (14) An | m or Hand, Not Otherwise | |
| | Eye Lid | `´ S | Specified | |
| (03) | Ear | (15) Ge | | |
| | Nose | (16) Le | | |
| (05) | Head or Neck, Not | (17) Fo | g or Foot, Not Otherwise | |
| (06) | Otherwise Specified Cheek, chin or jaw | | Specified | |
| | Neck or Supraclavicular | | in, Not Otherwise Specified | |
| | Vermilion | | perlip, Not Otherwise | |
| | Trunk, Front | | Specified | |
| | Trunk, Back | | werlip, Not Otherwise | |
| (11) | Trunk, Not Otherwise Specified | | Specified , Not Otherwise Specified | |
| (12) | Arm | (/ | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| | Hand | | | |
| , , | | 120 | | |
| May 15, 1992 | 16:10 | pm | Field Version 1.1 | |

INTERVIEWER: FOR EACH SITE REPORTED ASK Q.53A THROUGH Q.53E

SKIN CANCER ONLY

| SITE-1 | SITE 2 | SITE 3 |
|--|---|--|
| 53A.1 In what month and year was cancer of the (SITE) first diagnosed? | 53A.1 In what month and year was cancer of the (SITE) <u>first</u> diagnosed? | 53A.1 In what month and year was cancer of the (SITE) first diagnosed? |
| MONTH YEAR 77-80/ BEGIN DECK 45 | MONTH YEAR 15-18/ | MONTH YEAR 24-27/ |
| 53A.2 When did you <u>last consult</u> a doctor for cancer of (SITE)? | 53A.2 When did you <u>last consult</u> a doctor for cancer of (SITE)? | 53A.2 When did you <u>last consult</u> a doctor for cancer of (SITE)? |
| _ _ MONTH YEAR 10-13/ | _ _ MONTH YEAR 19-22/ | |
| SHOW PARTICIPANT HAND CARD P | SHOW PARTICIPANT HAND CARD P | SHOW PARTICIPANT HAND CARD P |
| 53B. What kind of skin cancer was this? | 53B. What kind of skin cancer was this? | 53B. What kind of skin cancer was this? |
| Basal cell carcinoma 1 14/ | Basal cell carcinoma 1 23/ | Basal cell carcinoma . 1 32/ |
| Squamous cell carcinoma2 | Squamous cell carcinoma 2 | Squamous cell carcinoma 2 |
| Melanoma3 | Melanoma 3 | Melanoma 3 |
| Cancer metastatic to the skin 4 | Cancer metastatic to the skin 4 | Cancer metastatic to the skin 4 |
| DON'T KNOW8 | DON'T KNOW 8 | DON'T KNOW 8 |

| | SITE 1 | | SITE 2 | | SITE 3 |
|-----------------------------|---|-------|--|-------|---|
| ad me dia CC AL | hat is the full name and dress of the doctor or the edical facility where the first agnosis was made? OMPLETE MEDICAL JTHORIZATION FORM IF ECESSARY. | 53C.1 | What is the full name and address of the doctor or the medical facility where the first diagnosis was made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. | 53C.1 | What is the full name and address of the doctor or the medical facility where the <u>first</u> diagnosis was made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. |
| PH | IYSICIAN'S LAST NAME 33/ | | PHYSICIAN'S LAST NAME 34/ | | PHYSICIAN'S LAST NAME 35/ |
| FII | RST NAME | | FIRST NAME | | FIRST NAME |
| | OR | | OR | | OR |
| FA | ACILITY NAME | | FACILITY NAME | | FACILITY NAME |
| ST | REET ADDRESS | | STREET ADDRESS | | STREET ADDRESS |
| cr | TY STATE | | CITY STATE | | CITY STATE |
| ad me co AL NE | hat is the full name and dress of the doctor or edical facility you <u>last</u> nsulted? COMPLETE JTHORIZATION FORM IF ECESSARY. IF SAME AS C.1, WRITE "SAME AS IN 1" | 53C.2 | What is the full name and address of the doctor or medical facility you <u>last</u> consulted? COMPLETE AUTHORIZATION FORM IF NECESSARY. IF SAME AS IN C.1, WRITE "SAME AS IN C.1" | 53C.2 | What is the full name and address of the doctor or medical facility you last consulted? COMPLETE AUTHORIZATION FORM IF NECESSARY. IF SAME AS IN C.1, WRITE "SAME AS IN C.1" |
| PH | YSICIAN'S LAST NAME | | PHYSICIAN'S LAST NAME | | PHYSICIAN'S LAST NAME |
| FII | RST NAME | | FIRST NAME | | FIRST NAME |
| | OR | | OR | | OR |
| FA | CILITY NAME | | FACILITY NAME | | FACILITY NAME |
| ST | REET ADDRESS | | STREET ADDRESS | | STREET ADDRESS |
| cr | TY STATE | | CITY STATE | | CITY STATE |

| SITE 1 | SITE 2 | SITE 3 | | | | |
|---|--|---|--|--|--|--|
| 53D. SHOW PARTICIPANT HAND CARD Q. What treatments or medicines (do/did) you take for cancer of the (SITE)? CODE ALL THAT APPLY | 53D. SHOW PARTICIPANT HAND CARD Q. What treatments or medicines (do/did) you take for cancer of the (SITE)? CODE ALL THAT APPLY | 53D. SHOW PARTICIPANT HAND CARD Q. What treatments or medicines (do/did) you take for cancer of the (SITE)? CODE ALL THAT APPLY | | | | |
| Radiation | Radiation 1 56/ Chemotherapy 2 57/ Surgery 3 58/ OTHER (SPECIFY) 4 59/ | Radiation | | | | |
| NONE 0 | NONE 0 | NONE 0 | | | | |
| 53E. During what month and year did you first receive (EACH TREATMENT CODED IN Q.53D) for cancer of the (SITE)? | 53E. During what month and year did you first receive (EACH TREATMENT CODED IN Q.53D) for cancer of the (SITE)? | 53E. During what month and year did, you first ive (EACb TREATMENT CODED IN Q.53D) for cancer of the (SITE)? | | | | |
| RADIATION - | RADIATION - | RADIATION - | | | | |
| CHEMO- THERAPY - | CHEMO- THERAPY - | CHEMO- THERAPY - MONTH YR 14-17/ | | | | |
| SURGERY - | SURGERY - | SURGERY - | | | | |
| OTHER LI LI MONTH YR 52-55/ | OTHER | OTHER 10-21/ MONTH YR 22-25/ | | | | |
| IF SECOND SITE CODED IN Q.53 GO TO SITE 2, Q.53A.1, PAGE G-31. | IF THIRD SITE CODED IN Q.53 GO TO SITE 3, Q.53A.1, PAGE G-31. | · | | | | |
| IF Q.52 CODED "3," ASK Q.54A | IF Q.52 CODED "3," ASK Q.54A | IF Q.52 CODED "3," ASK Q.54A | | | | |
| IF Q.52 CODED "1," SKIP TO Q.55, PAGE G-37. | IF Q.52 CODED "1," SKIP TO Q.55, PAGE G-37. | IF Q.52 CODED "1," SKIP TO Q.55 PAGE G-37. | | | | |
| | | | | | | |

SYSTEMIC (BODY) CANCER ONLY

BEGIN DECK 47

| | QUESTION 54 BODY PART 1 | | QUESTION 54 BODY PART 2 | | QUESTION 54 BODY PART 3 |
|------|--|-------|--|-------|--|
| 54A. | In what part of your body (is/was) cancer located? RECORD VERBATIM 26-41/ | 54A. | In what part of your body (is/was) cancer located? RECORD VERBATIM 51-66/ | 54A. | In what part of your body (is/was) cancer located? RECORD VERBATIM 10-25/ |
| | | | | | |
| 54B. | What kind of cancer was it? 42/ | 54B. | What kind of cancer was it? 67/ | 54B. | What kind of cancer was it? 26/ |
| | | | | | |
| | | | | | |
| | In what month and year was cancer of the (BODY PART) first diagnosed? | 54C.1 | In what month and year was cancer of the (BODY PART) first diagnosed? | 54C.1 | In what month and year was cancer of the (BODY PART) first diagnosed? |
| | _ _ MONTH YEAR 43-46/ | | MONTH YEAR 68-71/ | | |
| | When did you last consult a doctor for cancer of the (BODY PART)? | 54C.2 | When did you last consult a doctor for cancer of the (BODY PART)? | 54C.2 | When did you last consult a doctor for cancer of the (BODY PART)? |
| | MONTH YEAR 47-50/ | | _ MONTH YEAR 72-75/ | | MONTH YEAR 31-34/ |

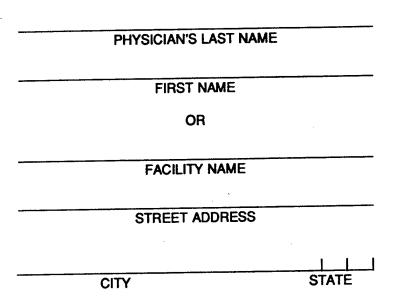
| | QUESTI BODY P | | QUEST BODY F | | | QUESTIC BODY PA | |
|---|-----------------------------|--|---|--|-----------------------------|--|---|
| 54E. | CARD Q. What medicines (do) | CIPANT HAND at treatments or /did) you take for (BODY PART)? | CARD Q. Wh medicines (do | TICIPANT HAND part treatments or coldid) you take for (BODY PART)? HAT APPLY | 54E. | SHOW PARTIC CARD Q. What medicines (do/o cancer of the (E CODE ALL TH/ | treatments or lid) you take for BODY PART)? |
| | Radiation | 1 36/ | Radiation | 1 41/ | | Radiation | 1 46/ |
| | Chemotherapy | 2 2 37/ | Chemotherap | y 2 42/ | | Chemotherapy | 2 47/ |
| | Surgery | 3 38/ | Surgery | 3 43/ | | Surgery | 3 48/ |
| | OTHER (SI | PECIFY) . 4 39/ | OTHER (\$ | SPECIFY) 4 44/ | | OTHER (SP | ECIFY) 4 49/ |
| | | | | | : . | | |
| | NONE | 0 40/R | NONE | 0 45/R | | NONE | 0 |
| | you first receive | ODED IN E) for | 54F. During what mo you first receive TREATMENT (cancer of the (E | E (EACH CODED IN E) for | 54F. | you first receive | CODED IN E) for |
| | RADIATION | MO YR 50-53/ | RADIATION | MO YR 67-70/ | | RADIATION | MO YR |
| 1 | CHEMO- THERAPY | | CHEMO- | · | | CHEMO- | |
| | ITENALI | MO YR 54-57/ | THERAPY | MO YR 71-74/ | | THERAPY | MO YR 19-22/ |
| ļ | SURGERY | MO YR 58-61/ | SURGERY | MO YR 75-78/ | _ | SURGERY | MO YR 23-26/ |
| , | OTHER | MO YR 62-65/ | OTHER | MO YR BEGIN DECK 48 10-13/ | | OTHER | 23-20 |
| 54G. IS THERE ANOTHER BODY PART AFFECTED? | | 54G. IS THERE ANOTHER BODY PART AFFECTED? | | 54G. | IS THERE AND PART AFFECT | 11 | |
| | YES (GO T BOD) | TO Q.54A Y PART 2) 1 | YES (GO BOD | TO Q.54A Y PART 3) 1 | | YES (GO) QUE) | TO NEW () 1 |
| · | NO(SKIP PAG | TO Q.55 E G-37) 2 66/ | NO(SKIF PAG | P TO Q.55 BE G-37) 2 14/ | | NO (SKIP PAG | TO Q.55 E G-37) 2 31/ |

| QUESTION 54 BODY PART 1 | QUESTION 54 BODY PART 2 | QUESTION 54 BODY PART 3 |
|---|---|---|
| 54D.1 What is the full name and address of the doctor or the medical facility where the diagnosis was first made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. | 54D.1 What is the full name and address of the doctor or the medical facility where the diagnosis was <u>first</u> made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. | 54D.1 What is the full name and address of the doctor or the medical facility where the diagnosis was first made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. |
| PHYSICIAN'S LAST NAME | PHYSICIAN'S LAST NAME | PHYSICIAN'S LAST NAME |
| FIRST NAME | FIRST NAME | FIRST NAME |
| OR | OR | OR |
| FACILITY NAME | FACILITY NAME | FACILITY NAME |
| STREET ADDRESS | STREET ADDRESS | STREET ADDRESS |
| CITY STATE | CITY STATE | CITY STATE |
| 54D.2 What is the full name and address of the doctor or medical facility you last consulted? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. IF SAME AS IN D.1, WRITE "SAME AS IN D.1" | 54D.2 What is the full name and address of the doctor or medical facility you last consulted? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. IF SAME AS IN D.1, WRITE "SAME AS IN D.1" | 54D.2 What is the full name and address of the doctor or medical facility you last consulted? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. IF SAME AS IN D.1, WRITE "SAME AS IN D.1" |
| PHYSICIAN'S LAST NAME | PHYSICIAN'S LAST NAME | PHYSICIAN'S LAST NAME |
| FIRST NAME | FIRST NAME | FIRST NAME |
| OR | OR | OR |
| FACILITY NAME | FACILITY NAME | FACILITY NAME |
| STREET ADDRESS | STREET ADDRESS | STREET ADDRESS |
| CITY STATE | CITY STATE | CITY STATE |

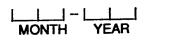
| 5 5. | At any time since (DATE OF LAST INTERVIEW) has a doctor told you that you had leukemia? | |
|--------------|--|---------|
| | YES (ASK Q.55A THROUGH Q.55F) 1 | 32/ |
| | NO (GO TO Q.56, PAGE G-39) 2 | |
| 55A. | Thinking about the period between (DATE OF LAST INTERVIEW) and now, in what month and year your leukemia diagnosed? | was |
| | MONTH YEAR | 33-36/ |
| 55B. | What is the name and address of the doctor or the medical facility where the diagnosis was made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. | |
| | PHYSICIAN'S LAST NAME | 37/ |
| | FIRST NAME | |
| | OR | |
| | | |
| | FACILITY NAME | - |
| | STREET ADDRESS | |
| | CITY STATE | |
| 55C | What treatments or medicines have you taken for leukemia since (DATE OF LAST INTERVIEW)? | |
| 330 . | 1) | 38-40/ |
| | 2) | 41-43/ |
| | 3) | 44-46/ |
| 55 D. | For the period between (DATE OF LAST INTERVIEW) and now, during what month and year did yo receive (EACH TREATMENT OR MEDICINE IN C)? | u first |
| - | MONTH YR. | |
| | TREATMENT 1 | 47-50/ |
| | TREATMENT 2 LLL LLL | 51-54/ |
| | TREATMENT 3 [| 55-58/ |
| | | |

59/

55E. What is the name and address of the doctor or medical facility you last consulted about your leukemia? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY.



55F. During what month and year did you last consult (NAME IN Q.55E)?



60-63/

| | A. | В. | C. | D. |
|---|--|---|--|---|
| 56. Since (DATE OF LAST INTERVIEW) have you had | FOR EACH YES, ASK A AND B. SHOW PARTICIPANT HAND CARD J. On what part of your body did you have (CONDITION)? Any other part? | Did you discuss (CONDITION) with a doctor since (DATE OF LAST INTERVIEW)? | ASK C THROUGH G FOR EACH "YES" AT B. What was the diagnosis? | What is the name and address of the doctor or medical facility? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. |
| 56.1 Patches of your skin change color YES 1 NO (SKIP TO Q.56.2 BELOW) . 2 64/ | SITE CODE 65-66/ SITE CODE 67-68/ SITE CODE 69-70/ | YES | 72/ | PHYSICIAN'S LAST NAME/FACILITY 73/ FIRST NAME ADDRESS CITY STATE |
| 66.2 Easier brusing of the skin than usual? YES | SITE CODE 75-76/ SITE CODE 77-78/ SITE CODE 79-80/ | BEGIN DECK 49 YES | 11/ | PHYSICIAN'S LAST NAME/FACILITY 12/ FIRST NAME ADDRESS L CITY STATE |
| (06) Cheek, chin (07) Neck or Sup (08) Vermilion (09) Trunk, Front (10) Trunk, Back | ck, Not Otherwise Specified or jaw oraclavicular | CODES FOR Q.56 (12) Arm (13) Hand (14) Arm or Hand (15) Genitals (16) Leg (17) Foot (18) Leg or Foot, (19) Skin, Not Oth (20) Upperlip, Not (21) Lowerlip, Not (22) Lip, Not Othe | Not Otherwise S herwise Specified t Otherwise Spec t Otherwise Spec | pecified I ified |

B-129

| E . | F. | G. |
|---|---|--|
| 56. ASK E THROUGH G FOR EACH "YES" AT B. During what month and year was that? | What is the name and address of the doctor or medical facility you last consulted about (CONDITION)? IF DIFFERENT DOCTOR IN D, COMPLETE AUTHORIZATION FORM. | During what month and year did you last consult (NAME FROM F)? |
| MONTH YEAR 13-16/ | PHYSICIAN'S LAST NAME | |
| | FIRST NAME OR | (SKIP BACK TO Q.56.2, PAGE G-39) |
| | FACILITY NAME | |
| | STREET ADDRESS | |
| | CITY STATE | |
| MONTH YEAR 22-25/ | PHYSICIAN'S LAST NAME | MONTH YEAR 27-30/ |
| | FIRST NAME OR | (GO TO Q.56.3, PAGE G-41) |
| | FACILITY NAME | |
| | STREET ADDRESS | |
| | CITY STATE | · |

| | A. | В. | C. | D. |
|--|--|--|---|---|
| 56. Since (DATE OF LAST INTERVIEW) have you had | IF YES AT Q.56.3, ASK A AND B. SHOW PARTICIPANT HAND CARD J. On what part of your body did you have (CONDITION)? Any other part? | Did you discuss (CONDITION) with a doctor since (DATE OF LAST INTERVIEW)? | ASK C THROUGH G FOR EACH "YES" AT B. What was the diagnosis? | What is the name and address of the doctor or medical facility? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. |
| 56.3 Skin that was extra sensitive or seemed to hurt for no reason? YES1 NO(SKIP TO Q.56.4 PAGE G-43)2 | SITE CODE 32-33/ SITE CODE 34-35/ SITE CODE 36-37/ | YES | 39/ | PHYSICIAN'S LAST NAME/FACILITY 40/ FIRST NAME ADDRESS CITY STATE |
| | | CODES FOR Q.56 | | |
| CODES: (01) Scalp or Forehead (02) Eye Lid (03) Ear (04) Nose (05) Head or Neck, Not Otherwise Specified (06) Cheek, chin or jaw (07) Neck or Supraclavicular (08) Vermilion (09) Trunk, Front (10) Trunk, Back (11) Trunk, Not Otherwise Specified (12) Arm (13) Hand | | Specified (15) Genitals (16) Leg (17) Foot (18) Leg or Foot Specified (19) Skin, Not O (20) Upperlip, Not Specified (21) Lowerlip, Not Specified | ot, Not Otherwise Otherwise Specifie Not Otherwise Not Otherwise | ed |

| E. | F. | G. |
|---|---|--|
| 56. ASK E THROUGH G FOR EACH "YES" AT B. During what month and year was that? | What is the name and address of the doctor or medical facility you last consulted about (CONDITION)? IF DIFFERENT DOCTOR IN D, COMPLETE AUTHORIZATION FORM. | During what month and year did you last consult (NAME FROM F)? |
| _ MONTH YEAR 41-44/ | PHYSICIAN'S LAST NAME 45/ FIRST NAME OR FACILITY NAME STREET ADDRESS | MONTH YEAR 46-49 |
| | CITY STATE | |

THIS PAGE INTENTIONALLY BLANK

| | | T | | |
|------|--|--|---------------------------------------|--------------------------------|
| | | A. | B. | C. |
| 56. | Aside from injury, since (DATE OF LAST INTERVIEW) have you had | ASK A THROUGH C FOR EACH YES IN Q.56.4 OR Q.56.5. Thinking about the period between (DATE OF LAST INTERVIEW) and now, when did you first notice (CONDITION)? | Which limbs or muscles were affected? | Do you still have (CONDITION)? |
| 56.4 | Persistent numbness of any of your limbs? YES | MONTH YEAR 51-54/ | 55-56/ | YES |
| 56.5 | Persistent tingling sensations in any of your limbs? YES | MONTH YEAR 59-62/ | 63-64/ | YES |

B-134

| D. | E. | F. | G. |
|--|--|-------------------------|---|
| 56. ASK D THROUGH G FOR EACH YES IN Q.56.4 OR Q.56.5. Between (DATE OF LAST INTERVIEW) and now, during what months and year(s) was the (CONDITION) most intense? | Did you see a doctor for (CONDITION) since (DATE OF LAST INTERVIEW)? | What was the diagnosis? | What is the name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. |
| MONTH YEAR 66-69/ TO MONTH YEAR 70-73/ | YES | 75/ | PHYSICIAN'S LAST NAME 76/ FIRST NAME OR |
| | | | FACILITY NAME |
| | | | STREET ADDRESS CITY STATE |
| MONTH YEAR 77-80/ TO BEGIN DECK 50 MONTH YEAR | YES | 15/ | PHYSICIAN'S LAST NAME 16/ FIRST NAME OR |
| 10-13/ | | | FACILITY NAME STREET ADDRESS |
| | | | CITY STATE |

| | | , |
|--|---|--|
| Н. | i. | J. |
| ASK H THROUGH J FOR EACH YES IN Q.56.4E OR Q.56.5E. During what month and year was that? | What is the name and address of the doctor or medical facility you last consulted about (CONDITION)? IF DIFFERENT DOCTOR IN G, COMPLETE AUTHORIZATION FORM. | During what month and year did you last consult (NAME FROM I)? |
| · | | |
| MONTH YEAR 17-20/ | PHYSICIAN'S LAST NAME 21/ | MONTH YEAR 22-25/ |
| | FIRST NAME OR | (SKIP BACK TO Q.56.5, PAGE G-43) |
| | FACILITY NAME | |
| | STREET ADDRESS | |
| | CITY STATE | |
| MONTH YEAR 14-17/ | PHYSICIAN'S LAST NAME | MONTH YEAR 31-34/ |
| | FIRST NAME | |
| | OR | |
| | FACILITY NAME | |
| | STREET ADDRESS | |
| | CITY STATE | |

B-136

| | | A. | В. | C. |
|------|---|--|---------------------------------------|--------------------------------|
| 57. | Aside from injury, since (DATE OF LAST INTERVIEW) have you had | ASK A THROUGH C FOR EACH YES IN 57. Thinking about the period between (DATE OF LAST INTERVIEW) and now, when did you first notice (CONDITION)? | Which limbs or muscles were affected? | Do you still have (CONDITION)? |
| 57.1 | Persistent deep burning sensations in any of your limbs? YES | MONTH YEAR 36-39/ | 40-41/ | YES |
| 57.2 | Persistent aches and pains in any of your limbs? YES | MONTH YEAR 44-47/ | 48-49/ | YES |

| D. | E. | F. | G. |
|--|--|-------------------------|---|
| 57. ASK D THROUGH G FOR EACH YES IN Q.57. Between (DATE OF LAST INTERVIEW) and now, during what months and year(s) was the (CONDITION) most intense? | Did you see a doctor for (CONDITION) since (DATE OF LAST INTERVIEW)? | What was the diagnosis? | What is the name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. |
| MONTH YEAR 51-54/ TO | YES | | PHYSICIAN'S LAST NAME 61/ FIRST NAME |
| MONTH YEAR 55-58/ | 59/ | 60 / | OR FACILITY NAME |
| | | | STREET ADDRESS |
| | | | L L STATE |
| MONTH YEAR 62-65/ | YES | | PHYSICIAN'S LAST NAME 72/ |
| TO MONTH YEAR | G-49)2 70/ | 71/ | FIRST NAME OR |
| 66-69/ | | | FACILITY NAME STREET ADDRESS |
| | | | CITY STATE |

| | , | |
|--|---|--|
| H. | ' - ' I. | J. |
| 57. During what month and year was that? | What is the name and address of the doctor or medical facility you last consulted about (CONDITION)? IF DIFFERENT DOCTOR IN G, COMPLETE AUTHORIZATION FORM. | During what month and year did you last consult (NAME FROM I)? |
| | | BEGIN DECK 51 |
| MONTH YEAR 73-76/ | PHYSICIAN'S LAST NAME 77/ | LLI LI MONTH YEAR 10-13/ |
| | FIRST NAME OR | GO TO Q.57.2, PAGE G-46 |
| | FACILITY NAME | |
| | STREET ADDRESS | |
| | CITY STATE | |
| MONTH YEAR 14-17/ | PHYSICIAN'S LAST NAME | MONTH YEAR 19-22/ |
| | FIRST NAME OR | |
| | FACILITY NAME | |
| | STREET ADDRESS | • |
| | CITY STATE | |

Page G-50

THIS PAGE INTENTIONALLY BLANK

| | | , | | |
|------|--|--|---------------------------------------|--------------------------------|
| | | A. | B. | C. |
| 58. | Aside from injury, since (DATE OF LAST INTERVIEW) have you had | ASK A THROUGH C FOR EACH YES IN Q.58. Thinking about the period between (DATE OF LAST INTERVIEW) and now, when did you first notice (CONDITION)? | Which limbs or muscles were affected? | Do you still have (CONDITION)? |
| 58.1 | A reduction in grip strength YES | MONTH YEAR 24-27/ | 28-29/ | YES |

| D. | E. | F. | G. |
|--|--|-------------------------|---|
| 58. ASK D THROUGH G FOR EACH YES IN Q.58. Between (DATE OF LAST INTERVIEW) and now, during what months and year(s) was the (CONDITION) most intense? | Did you see a doctor for (CONDITION) since (DATE OF LAST INTERVIEW)? | What was the diagnosis? | What is the name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? COMPLETE MEDICAL AUTHORIZATION FORM IF NECESSARY. |
| MONTH YEAR 31-34/ TO MONTH YEAR MONTH YEAR 35-38/ | YES | 40/ | PHYSICIAN'S LAST NAME 41/ FIRST NAME OR |
| | | | FACILITY NAME |
| | | | STREET ADDRESS |
| | | | CITY STATE |

| H. | l. | J. |
|--|---|--|
| 58. During what month and year was that? | What is the name and address of the doctor or medical facility you last consulted about (CONDITION)? IF DIFFERENT DOCTOR IN G, COMPLETE AUTHORIZATION FORM. | During what month and year did you last consult (NAME FROM I)? |
| | , | |
| MONTH YEAR 42-45/ | PHYSICIAN'S LAST NAME 46/ | MONTH YEAR 47-50/ |
| | FIRST NAME | " " |
| · | OR | |
| · | FACILITY NAME | |
| | STREET ADDRESS | |
| | CITY STATE | |

INTERVIEWER: BEFORE ASKING QUESTION 59 ON NEXT PAGE, SKIP TO Q.IS51, In I.S.R.B. on Page 13.

| 59 . | . (Besides the prescribed medicines you told me about) are you currently taking any (other) prescribed medicines? | | |
|-------------|---|--|----------------|
| | | YES (ASK Q.59A) | 1 51/ |
| | . , | NO (SKIP TO SECTION H) | 2 |
| | A. Please list the nam | ne of each medication and the condition for which it w | as prescribed. |
| | | | |
| | MEDICATIO | ON CONDITI | NC |
| | | ON CONDITI | |
| | | 1) | 52/ |

| SECTION H: HEALTH HABITS | |
|--|--|
| FOR THIS SECTION YOU WILL NEED: | |
| Hand Card R Hand Card S Hand Card T Hand Card U Hand Card V Hand Card W Hand Card X Hand Card Y Hand Card Z Hand Card Z Hand Card BB Hand Card CC Hand Card CD Hand Card EE Hand Card EE | |

| 1. | 1A. WAS R INTERVIEWED IN 1985/1986 OR 1987/1988? | | ĺ |
|-----|--|----------|-----|
| | YES (SKIP TO Q.62, PA | GE H-23) | 1 |
| | NO | | 2 |
| 1B. | B. THESE QUESTIONS ARE ASKED TO NEW PARTICIPANTS OR THOSE CO BASELINE. The next set of questions refers to smoking habits. Have you ever smoked at least as many as 5 packs of cigarettes, that is, 10 entire life? | | |
| | YES | 1 | 53/ |
| | NO (SKIP TO Q.22, PAGE H-9) | 2 | |
| 2. | 2. Do you <u>now</u> smoke cigarettes? | | |
| | YES | 1 | 54/ |
| | NO (SKIP TO Q.11, PAGE H-5) | 2 | |

CURRENT CIGARETTE SMOKER SECTION

| - | | |
|----|--|------|
| 3. | On average, how many cigarettes do you smoke a day? | |
| | IF R ANSWERS BY GIVING NUMBER OF PACKS OF CIGARETTES, RECORD VERBATIM IN MARGIN THEN MULTIPLY THE NUMBER OF PACKS BY 20 AND ENTER THE NUMBER OF CIGARETTES SMOKED. | • |
| | ENTER NUMBER OF CIGARETTES: PER DAY 55- | -56/ |
| | (IF NOT EVERY DAY:) # PER MONTH 57- | -58/ |
| | OR | 004 |
| | (IF NOT EVERY DAY:) # PER YEAR 59- | -60/ |
| 4. | SHOW PARTICIPANT HAND CARD R. For how many years have you been smoking (NUMBER IN Q.3) cigarettes (per day/per month/per year)? | |
| | Less than 2 years | -62/ |
| | 2-5 years02 | |
| | 6-10 years03 | |
| | 11-15 years | |
| | 16-20 years | |
| | 21-25 years | |
| | 26-30 years | |
| | 31-35 years | |
| | 36-40 years | |
| | More than 40 years | |
| 5. | What brand of cigarettes do you usually smoke? (IF MORE THAN ONE BRAND OR NO REGULAR BRAND MENTIONED ASK: Which one do you smoke the most?) | |
| | OFFICE USE | |
| | ENTER BRAND 63- | -65/ |
| | NO REGULAR BRAND (SKIP TO Q.8, PAGE H-3) | |

| 6. | For | for how long now have you been smoking this particular brand? | | |
|----|------|---|---|-------|
| | | ENTER DAYS: | | 56-67 |
| | | OR WEEKS: | | 68-69 |
| | | OR MONTHS: | 7 | 70-71 |
| , | | OR YEARS: | 7 | 72-73 |
| 7. | Wha | What type of cigarettes are they? Are they (READ EACH PAIR | TOGETHER) | |
| | A. | CODE ONE NUMBER a. Filter tip or | 1 | 74/ |
| | | Non-filter tip? | 2 | |
| | В. | CODE ONE NUMBER Regular size | 4 | 75/ |
| | D. | King size or | | , 0, |
| | | 100 Millimeter? | • | |
| 8. | Plea | HOW PARTICIPANT HAND CARD S. Now I am going to show you lease look at the picture of the (KIND OF CIGARETTE NAMED IN cour style of smoking-for example, how long you usually leave the cour hand-tell me the number which indicates how much of the cigar | Q.7A AND Q.7B). Now, considering arette in an ashtray or just hold it | ng |
| | | SECTION 1 | 1 | 76/ |
| | | SECTION 2 | 2 | |
| | | SECTION 3 | 3 | |
| | | SECTION 4 | 4 | |

| 9. | During the period when you were smoking the most heavily on a regular basis, about how did you usually smoke in a day? (CONVERT PACKS TO NUMBER OF CIGARETTES BY NUMBER OF PACKS BY 20) | many cigarettes MULTIPLYING |
|-----|---|--------------------------------|
| | ENTER NUMBER OF CIGARETTES: PER DAY | 77-78 |
| | (IF NOT EVERY DAY:) # PER MONTH | 79-80/ |
| | OR | BEGIN DECK 52 |
| | (IF NOT EVERY DAY:) # PER YEAR | 10-11/ |
| | A. When was that? | |
| | FROM | |
| | MONTH YEAR | 12-15/ |
| | то | • |
| | MONTH YEAR | 16-19/ |
| 10. | SHOW PARTICIPANT HAND CARD T. When you smoke cigarettes, how deeply do you u Would you say: | sually inhale? |
| | As deeply into the chest as possible | 20/ |
| | Only partly into the chest | |
| | As far back as the throat | |
| | Well back into the mouth, or4 | |
| | Just puff and don't really draw it in at all | |
| | DON'T KNOW8 | |
| | SKIP TO Q.22, PAGE H-9 | |
| | | |

FORMER CIGARETTE SMOKER SECTION

| го | nmen cigarette smoken section | |
|-----|--|------------------------|
| 11. | How long has it been since you smoked cigarettes fairly regularly (RECORD NUMBER)? | |
| | ENTER DAYS: | 21-22/ |
| | OR WEEKS: | 23-24/ |
| | OR MONTHS: | 25-26/ |
| | OR YEARS: | 27-28/ |
| | NEVER SMOKED REGULARLY (SKIP TO Q.22, PAGE H-9)1 | 29/ |
| 12. | On the average, about how many cigarettes a day were you smoking at that time? | |
| | IF R ANSWERS BY GIVING NUMBER OF PACKS OF CIGARETTES, RECORD VERBATING THEN MULTIPLY THE NUMBER OF PACKS BY 20 AND ENTER THE NUMBER OF CIGAR SMOKED. | I IN MARGIN. RETTES |
| | ENTER NUMBER OF CIGARETTES: PER DAY | 30-31/ |
| | (IF NOT EVERY DAY:) # PER MONTH | 32-33/ |
| | (IF NOT EVERY DAY:) # PER YEAR | 34-35 / |

| | May 45 4002 | 16:1 | 8 pm | Field Version 1. | .1 |
|-----|---|---|-------------------------|-------------------------------|--------|
| | NO REGULAR BRAND | (SKIP TO C |).19, PAGE H-7) | 99 6 | |
| | ENTER BRAND | | | | 47-49/ |
| 16. | BRAND MENTIONED | es did you usually smoke? (I ASK: Which one did you sm | oke the most?) | RAND OR NO REGULAR OFFICE USE | |
| | | OR YEARS: | | | 45-46/ |
| | | OR MONTHS: | | | 43-44/ |
| | | OR WEEKS: | | | 41-42/ |
| | | ENTER DAYS: | | | 39-40/ |
| 15. | How long did you stay | off cigarettes at that time? (| PROBE: About how lor | g did you stay off?) | • |
| | | NO (SKI | P TO Q.16, BELOW) . | 2 | |
| | | YES | | 1 | 38/ |
| 14. | You mentioned that you a longer period of time? | ı have not smoked regularly? | for (TIME IN Q.11). Did | I you ever stay off cigarette | s for |
| | | More than 40 years | | 10 | |
| | | 36-40 years | | 09 | |
| | | 31-35 years | | | |
| | | 26-30 years | | | |
| | | 16-20 years | | | |
| | | 11-15 years | | | |
| | | 6-10 years | | | |
| | | 2-5 years | | | |
| | - | Less than 2 years | | 01 | 36-37/ |
| 13. | SHOW PARTICIPANT (per day/per month/per | HAND CARD R. How long I year)? | had you been smoking (| NUMBER IN Q.12) cigarett | es |
| | | | | | |

| 17. | For how long did you smoke this particular brand? | |
|-----|---|---------------------------------------|
| | ENTER DAYS: | 50-51/ |
| | OR WEEKS: | 52-53/ |
| | OR MONTHS: | 54-55/ |
| | OR YEARS: | 56-57/ |
| 18. | What type of cigarettes were they? Were they (READ EACH PAIR TOGETHER) | |
| | CODE ONE NUMBER | |
| | A. Filter tip or | 58/ |
| | Non-filter tip? | |
| | | |
| | King size or 2 100 Millimeter? 3 | |
| 19. | SHOW PARTICIPANT HAND CARD S. Now I am going to show you a diagram of difference Please look at the picture of the (KIND OF CIGARETTE IN Q.18A AND Q.18B). Now, co style of smokingfor example, how long you usually leave the cigarette in an ashtray or jud handtell me the number which indicates how much of the cigarette you actually smoked. | nsidering your ist hold it in your |
| | Section 1 | 60/ |
| | Section 2 | |
| | Section 3 | |
| | Section 4 | |

| 20. | During the period when you were smoking the most heavily on a regular basis, about how many of did you usually smoke in a day? | igarettes |
|-----|--|-------------|
| | ENTER NUMBER OF CIGARETTES: PER DAY | 61-62 |
| | (IF NOT EVERY DAY:) # PER MONTH | 63-64/ |
| · | (IF NOT EVERY DAY:) # PER YEAR | 65-66/ |
| | A. When was that? | |
| | MONTH YEAR | 67-70 |
| | TO . | |
| | MONTH YEAR | 71-74 |
| 21. | SHOW PARTICIPANT HAND CARD T. When you smoked cigarettes, how deeply did you usually Would you say: | inhale? |
| | As deeply into the chest as possible1 | 7 5/ |
| | Only partly into the chest | |
| | As far back as the throat3 | |
| | Well back into the mouth, or4 | |
| | Just puff and don't really draw it in at all | |
| | DON'T KNOW8 | |

| CU | RRENT PIPE SMOKER SECTION | |
|-------------|---|---------------|
| 22. | During your entire life, have you smoked at least as many as 50 pipefuls of tobacco? | |
| | YES1 | 76/ |
| | NO (SKIP TO Q.35, PAGE H-14) 2 | |
| 23 . | Do you now smoke a pipe? YES | 77/ |
| | NO (SKIP TO Q.28, PAGE H-11) 2 | |
| 24. | About how many average sized pipefuls of tobacco do you usually smoke in a day? | |
| | ENTER NUMBER OF PIPEFULS OF TOBACCO: | 78-79/ |
| | | BEGIN DECK 53 |
| | (IF NOT EVERY DAY:) # PER MONTH | 10-11/ |
| | (IF NOT EVERY DAY:) # PER YEAR | 12-13/ |
| 25. | SHOW PARTICIPANT HAND CARD R. For how many years have you been smoking (NU pipefuls (per day/per month/per year)? | MBER IN Q.24) |
| | Less than 2 years | 14-15/ |
| | 2-5 years02 | |
| | 6-10 years03 | |
| | 11-15 years | |
| | 16-20 years | |
| | 21-25 years | |
| | 26-30 years | |
| | 31-35 years | |
| | 36-40 years | |
| | More than 40 years | |

| 26. | During the period when you were smoking the most heavily, about how many pipefuls of tobacco did usually smoke in a day? | you |
|-----|--|--------|
| | ENTER NUMBER PER DAY | 16-17/ |
| | (IF NOT EVERY DAY:) # PER MONTH | 18-19/ |
| | OR (IF NOT EVERY DAY:) # PER YEAR | 20-21/ |
| | A. When was that? | |
| | MONTH YEAR | 22-25 |
| | то | |
| | MONTH YEAR | 26-29 |
| 27. | SHOW PARTICIPANT HAND CARD T. When you smoke a pipe, how deeply do you usually inhale? you say: | Would |
| | As deeply into the chest as possible1 | 30/ |
| | Only partly into the chest | |
| | As far back as the throat3 | |
| | Well back into the mouth, or4 | |
| | Just puff and don't really draw it in at all | |
| | DON'T KNOW8 | |
| | SKIP TO Q.35, PAGE H-14 | |
| | | |

| F | n | R | M | F | R | D | ID | F | C | M | | K | EF | 2 | F | CI | 11 | 71 | J |
|---|---|---|-----|---|---|---|----|---|-----|---|---|---|----|---|---|----|----|------------|---|
| • | v | п | 1.1 | | n | | H | _ | - 2 | | ~ | " | | | | • | | J r | ŧ |

| 28. | How long has it been since you smoked a pipe fairly regularly? (RECORD NUMBER) | |
|-----|---|---------------|
| | ENTER DAYS: | 31-32/ |
| | OR WEEKS: | 33-34/ |
| | OR MONTHS: | 35-36/ |
| | OR YEARS: NEVER SMOKED REGULARLY (SKIP TO Q.35, PAGE H-14) 1 | 37-38/ 39/ |
| | | 35/ |
| 29. | On the average, about how many pipefuls of tobacco a day were you smoking at that time? | |
| | ENTER NUMBER OF PIPEFULS OF TOBACCO: | 40-41/ |
| | (IF NOT EVERY DAY:) # PER MONTH | 42-43/ |
| | (IF NOT EVERY DAY:) # PER YEAR | 44-45/ |
| 30. | SHOW PARTICIPANT HAND CARD R. For how long did you smoke (NUMBER IN Q.29) pipefuls of tobacco (per day/per week/per month)? | |
| | Less than 2 years | 46-47/ |
| | 2-5 years02 | |
| | 6-10 years | |
| | 11-15 years | |
| | 16-20 years | |
| | 21-25 years | |
| | 26-30 years | |
| | 31-35 years | |
| | 36-40 years | |
| | More than 40 years | |

| 31. | You mentioned that you have not smoked regularly for (TIME RECORDED IN Q.28). Did you ever no smoke a pipe for a longer period of time? | ot |
|-----|---|--------|
| | YES1 | 48/ |
| | NO (SKIP TO Q.33, BELOW) 2 | |
| 32. | How long did you not smoke a pipe at that time? | |
| | ENTER DAYS: | 49-50/ |
| | OR WEEKS: | 51-52/ |
| | OR MONTHS: | 53-54/ |
| | OR YEARS: | 55-56/ |
| 33. | During the period when you were smoking the most heavily on a regular basis, about how many pipel tobacco did you usually smoke in a day? | uls of |
| | ENTER NUMBER PER DAY | 57-58/ |
| | (IF NOT EVERY DAY:) # PER MONTH | 59-60/ |
| | OR (IF NOT EVERY DAY:) # PER YEAR | 61-62/ |
| | A. When was that? | • |
| | MONTH YEAR | 63-66/ |
| | TO | |
| | MONTH YEAR | 67-70/ |

34. SHOW PARTICIPANT HAND CARD T. When you smoked a pipe, how deeply did you usually inhale? Would you say:

| As deeply into the chest as possible1 | /1 |
|--|----|
| Only partly into the chest | |
| As far back as the throat | |
| Well back into the mouth, or4 | |
| Just puff and don't really draw it in at all | |
| DON'T KNOW 8 | |

| CUI | RRENT CIGAR SMOKER S | SECTION | |
|-----|--|---|---------------------|
| 35. | During your entire life have | e you smoked at least as many as 50 cigars? | |
| | - · · Y | 'ES1 | 72/ |
| | N | O (SKIP TO Q.51, PAGE H-19) 2 | |
| 36. | Do you now smoke cigars | ? | |
| | Y | ES1 | 73/ |
| | N | O (SKIP TO Q.42, PAGE H-17) 2 | |
| 37. | On average, about how ma | any cigars a day do you now smoke? | |
| | ENTER N | IUMBER OF CIGARS: PER DAY | 74- 75/ |
| | (II | F NOT EVERY DAY:) # PER MONTH | 76-77/ |
| | (II | F NOT EVERY DAY:) # PER YEAR | 78- 79/ |
| 38. | SHOW PARTICIPANT HAI RECORDED IN Q.37) ciga | ND CARD R. For how many years have you been smoking (Nars (per day/per month/per year)? | UMBER BEGIN DECK 54 |
| | Le | ess than 2 years0 | |
| | 2- | 5 years0 | 2 |
| | 6- | -10 years0 | 3 |
| | . 11 | 1-15 years | 4 |
| | 16 | 6-20 years | 5 |
| | 21 | 1-25 years | 3 |
| - | 26 | 6-30 years | 7 |
| | 31 | 1-35 years | 3 |
| | 36 | 5-40 years | • |
| | Me | ore than 40 years10 |) |

| 39. | During the period when you were smoking the most heavily on a regular basis, about how many ciga you usually smoke in a day. | rs did |
|-----|--|--------|
| | ENTER NUMBER PER DAY | 12-13/ |
| | (IF NOT EVERY DAY:) # PER MONTH | 14-15/ |
| | OR (IF NOT EVERY DAY:) # PER YEAR | 16-17/ |
| | A. When was that? | |
| | FROM | |
| | MONTH YEAR | 18-21/ |
| | ТО | |
| | MONTH YEAR | 22-25/ |
| 40. | SHOW PARTICIPANT HAND CARD T. When you smoke cigars, how deeply do you usually inhale? you say: | Would |
| | As deeply into the chest as possible1 | 26/ |
| | Only partly into the chest | - |
| | As far back as the throat | |
| | Well back into the mouth, or4 | |
| | Just puff and don't really draw it in at all | |
| | DON'T KNOW8 | |
| | | |

| 27/ cigars. kingfor he number |
|--|
| he numbei |
| he numbei |
| |
| 28/ |
| |
| |
| |
| |

| FORMER | CIGAR | SMOKER | SECTION |
|--------|-------|--------|---------|
| | | | |

| 42 . | How long has it been since you smoked cigars fairly regularly? | |
|-------------|--|----------------|
| | ENTER DAYS: | 29-30/ |
| | OR WEEKS: | 31-32/ |
| | OR MONTHS: | 33-34/ |
| | OR YEARS: | 35-36/ |
| | NEVER SMOKED REGULARLY (SKIP TO Q.51, PAGE H-19) 1 | 37/ |
| 43 . | On the average, about how many cigars a day were you smoking at that time? | |
| | ENTER NUMBER OF CIGARS: PER DAY | 38-39/ |
| | (IF NOT EVERY DAY:) # PER MONTH | 40-41/ |
| | <u>OR</u> | |
| | (IF NOT EVERY DAY:) # PER YEAR | 42-43/ |
| 44. | SHOW PARTICIPANT HAND CARD R. For how long did you smoke (NUMBER PER DAY II per day? | N Q.43) cigars |
| | Less than 2 years | 44-45/ |
| | 2-5 years02 | |
| | 6-10 years | |
| | 11-15 years | |
| | 16-20 years | |
| | 21-25 years | |
| | 26-30 years | |
| | 31-35 years | |
| | 36-40 years | |
| | More than 40 years10 | |

| 45 . | You mentioned that you have not smoked regularly for (TIME RECOIL cigars for a longer period of time? | RDED IN Q.42). Did you ever stay off |
|-------------|--|--------------------------------------|
| | YES | 1 46/ |
| | NO (SKIP TO Q.47, BELC | OW)2 |
| 46. | . How long did you stay off cigars at that time? | |
| | ENTER DAYS: | 47-48/ |
| | OR WEEKS: | 49-50/ |
| | OR MONTHS: | 51-52/ |
| | OR YEARS: | 53-54/ |
| 47. | . What type of cigars did you usually smoke just before you stopped si | moking cigars regularly? |
| | ONLY CODE ONE TYPE Filter tip or | |
| | Non-filter tip? | |
| 48 . | . SHOW PARTICIPANT HAND CARD U. Now I am going to show you Please look at the picture of the (KIND OF CIGAR IN Q.47). Now, or example, how long you usually leave the cigar in an ashtray or just he which indicates how much of the cigar you actually smoke. | onsidering your style of smokingfor |
| | SECTION 1 | 1 56/ |
| | SECTION 2 | 2 |
| | SECTION 3 | 3 |
| | SECTION 4 | 4 |

| 49 . | During the period when you were smoking the most on a regular basis, about how many cigars did you usually smoke in a day? | ou |
|-------------|--|-------|
| | ENTER NUMBER PER DAY | 57-58 |
| | (IF NOT EVERY DAY:) # PER MONTH | 59-60 |
| | OR (IF NOT EVERY DAY:) # PER YEAR | 61-62 |
| | A. When was that? | |
| | MONTH YEAR | 63-66 |
| | то | |
| | MONTH YEAR | 67-70 |
| 50. | SHOW PARTICIPANT HAND CARD T. When you smoked a cigar, how deeply did you usually inhak Would you say: | ∌? |
| | As deeply into the chest as possible1 | 71/ |
| | Only partly into the chest | |
| | As far back as the throat | |
| | Well back into the mouth, or | |
| | Just puff and don't really draw it in at all | , |
| | DON'T KNOW 8 | |
| 51. | IS PARTICIPANT CURRENTLY LIVING WITH A SPOUSE OR PARTNER? CHECK INFORMATION SHEET. | |
| | IS ANY "NO" CODED IN SECTION E: Q.2, PAGE E-3, Q.6C, PAGE E-10, OR Q.8C, PAGE E-14? | |
| | YES1 | 72/ |
| | NO (SKIP TO Q.53, PAGE H-20) 2 | |

| 2. D | oes your (spouse/p | artner) sm | oke regular | ty any of the following? | |
|------|-----------------------------------|------------|---------------|---|-------------|
| | | YES | NO | DON'T KNOW | |
| | Cigarettes | 1 | 2 | 8 | 73 / |
| | Cigars | 1 | 2 | 8 | 74/ |
| | Pipe | 1 | 2 | 8 | 75/ |
| 3. A | pproximately how n | nuch smok | e is there in | n the air in your home? | |
| | | A lot | | 1 | 76/ |
| | | A little | | 2 | |
| | | NONE | | (SKIP TO Q.56, PAGE H-21)3 | |
| | HOW PARTICIPAN | | CARD V. A | pproximately how many hours a week are you expose | ed to this |
| | | 10 ho | urs or less | 1 | 77/ |
| | | 11 to | 15 hours | 2 | • |
| | | 16 to | 20 hours | 3 | |
| | | 21 to 3 | 25 hours | | |
| | | 26 or | more hours | 5 | |
| | HOW PARTICIPAN ay? (CHECK ONL) | | CARD W. F | For how many years have you been exposed to smoke | e in this |
| | | Less t | han 1 year | | 78-79/ |
| | | 1 to 4 | years | | |
| | | 5 to 1 | years | | |
| | | 11 to | 15 years | 04 | |
| | | 16 to 2 | 20 years | | |
| | | 21 to 3 | 30 years | | |
| | | More 1 | han 30 yea | rs07 | |
| | | DONT | KNOW | | |

| 56 . | DOES R WORK? (IS SECTION C, Q.1F PA | "YES" CODED AT SECTION B, Q.4, PAGE B-5 OR "CURRENGE C-2)? | IT JOB" CODE | ED AT |
|-------------|-------------------------------------|---|-----------------|-------------|
| | | YES | BEGIN DEC | K 55 10/ |
| | → : | NO (SKIP TO Q.62, PAGE H-23) | | |
| | | | | = |
| | | w much smoke is there in the air in the transportation you take r, the train, the bus, etc.)? | to and from w | ork (For |
| | | A lot | 1 | 11/ |
| | | A little | 2 | |
| | V | NONE (SKIP TO Q.59, PAGE H-22) | 3 | |
| 57. | SHOW PARTICIPANT smoke? | HAND CARD V. Approximately how many hours a week are y | you exposed to | this |
| | | 10 hours or less | 1 | 12/ |
| | | 11 to 15 hours | 2 | |
| | | 16 to 20 hours | 3 | |
| | | 21 to 25 hours | 4 | |
| | | 26 or more hours | 5 | |
| 58. | SHOW PARTICIPANT | HAND CARD W. For how many years have you been expose | d to this smoke | e? |
| | | Less than 1 year | 01 | 13-14/ |
| | | 1 to 4 years | 02 | |
| | | 5 to 10 years | 03 | |
| | | 11 to 15 years | 04 | |
| | | 16 to 20 years | 05 | |
| | | 21 to 30 years | 06 | |
| | | More than 30 years | 07 | |
| | | DON'T KNOW | 98 | |

| 59. | Approximately how much | ch smoke is there in the air where you work? | |
|-------------|-------------------------|--|---------|
| | | A lot | 15/ |
| | | A little | |
| | | NONE (SKIP TO Q.62, PAGE H-23) | |
| 6 0. | SHOW PARTICIPANT smoke? | HAND CARD V. Approximately how many hours a week are you exposed | to this |
| | | 10 hours or less | 16/ |
| | | 11 to 15 hours | |
| | | 16 to 20 hours | |
| | | 21 to 25 hours | |
| | | 26 or more hours | |
| 61. | For how many years ha | ve you been exposed to this smoke at work? | |
| | | Less than 1 year01 | 17-18/ |
| | | 1 to 4 years02 | |
| | | 5 to 10 years | |
| | | 11 to 15 years | |
| | | 16 to 20 years | |
| | | 21 to 30 years | |
| | | More than 30 years07 | |

62. SHOW PARTICIPANT HAND CARD X. There are some questions that are asked in survey research that are difficult to ask directly because many people think they are too personal. While it is understandable that people feel this way, there is a real need for the information for the population as a whole. We now have a way that makes it possible for people to give information, without telling anyone about their own situation. Let me show you how this works; we will use the next question I have here as an example.

CONTINUE WITH CARD X. As you see, there are two questions on the card. One deals with the "real" question that the research is concerned with, the other is completely unrelated. Both questions can be answered "yes" or "no." One of the two questions is selected by chance and you answer it. (I'll show you how that works in a minute). I do not know which question you are answering. When all the questionnaires have been tallied, the researchers can tell how many people have smoked marijuana, but they have no way of knowing whether it was you or any other person in particular who has smoked marijuana.

HAND R COIN

It is very simple, as you will see. You will flip the coin. The question you will answer is selected by chance. In no way can a truthful answer prove harmful to you. There is no identifying information that can link you to your answers.

Please take the coin that you have been handed and flip it now. <u>Don't tell me</u> which side came up. If the coin shows heads, please answer only question 1. If the coin shows tails, please answer only question 2. I won't look to see if the coin comes up heads or tails; and you don't tell me which question you are answering. Just tell me if your answer is "yes" or "no."

| YES1 | 19/ |
|------------|-----|
| NO2 | |
| DON'T KNOW | |

A. SHOW PARTICIPANT HAND CARD Y. Now let's do that again, using the next question. CONTINUE WITH CARD Y. Flip the coin again. If the coin turns up heads, please answer only question number 1. If the coin comes up tails, please answer only question number 2. Don't tell me the question. Is your answer "yes" or "no"?

| YES1 | 20/ |
|------------|-----|
| NO | |
| DON'T KNOW | |

IF PARTICIPANT INTERVIEWED IN CYCLES '85-'86 AND/OR '87-'88, GO TO Q.63, PAGE H-24. OTHERWISE, SKIP TO Q.64, PAGE H-43.

SMOKING INTERVAL QUESTIONS

| 63. THIS SECTION FOR F | PARTICIPANTS INTERVIEWED IN CYCLES '85,-'86 AND/OR CYCLE '87-'86 | 3. |
|---|---|----------------|
| IF PARTICIPANT NEW | V TO STUDY OR ONLY COMPLAINT AT BASELINE, DO NOT ASK THIS SI | ECTION. |
| 63a. The next set of ques | stions refers to smoking habits. | |
| 63-1. Have you ever smok entire life? | ked at least as many as 5 packs of cigarettes, that is, 100 cigarettes, during y | our |
| | YES1 | 53/ |
| | NO (SKIP TO Q.63-14, PAGE H-30) 2 | |
| 63-2. Do you now smoke (| cigarettes? | |
| | YES1 | 54/ |
| | NO (SKIP TO Q.63-8, PAGE H-27) 2 | |
| CURRENT CIGARETTE SM | MOKER SECTION | |
| 63-3. On average, how ma | any cigarettes do you smoke a day? | |
| IF R ANSWERS BY GIVING MULTIPLY THE NUMBER (| G NUMBER OF PACKS OF CIGARETTES, RECORD VERBATIM IN MARGI OF PACKS BY 20 AND ENTER THE NUMBER OF CIGARETTES SMOKED | N. THEN |
| ENTER NU | MBER OF CIGARETTES: PER DAY | 55-56/ |
| | (IF NOT EVERY DAY:) # PER MONTH | 57-58/ |
| | OR | |
| | (IF NOT EVERY DAY:) # PER YEAR | 59-6 0/ |

| 63-4. | | HOW PARTICIPANT HAND CARD R. For how many years have you been smoking (NUMBER cigarettes (per day/per month/per year)? | IN Q.63- |
|-------|-----|--|-------------|
| | | Less than 2 years01 | 61-62/ |
| | | 2-5 years02 | |
| | | 6-10 years03 | |
| | | 11-15 years | |
| | | 16-20 years | |
| | | 21-25 years | |
| | | 26-30 years | |
| | | 31-35 years | |
| | | 36-40 years | |
| | | More than 40 years10 | 63-73/R |
| 63-5. | Wha | hat type of cigarettes are they? Are they (READ EACH PAIR TOGETHER) | |
| | A. | CODE ONE NUMBER Filter tip or | 74/ |
| | Λ. | Non-filter tip? | |
| | | | |
| | В. | CODE ONE NUMBER Regular size1 | 75 / |
| | | King size or | |
| | | 100 Millimeter? | 76/R |

| 63-6. | During the period when you were smoking the most heavily on a regular basis, about hor cigarettes did you usually smoke in a day? | w many |
|-------|---|-----------------|
| | ENTER NUMBER PER DAY | 77-78 / |
| | (IF NOT EVERY DAY:) # PER MONTH | 79-80/ |
| | OR | BEGIN DECK 52 |
| | (IF NOT EVERY DAY:) # PER YEAR | 10-11/ |
| | A. When was that? | |
| | FROM | |
| | MONTH YEAR | 12-15/ |
| | TO | |
| | MONTH YEAR | 16-19/ |
| 63-7. | SHOW PARTICIPANT HAND CARD T. When you smoke cigarettes, how deeply do you would you say: | usually inhale? |
| | As deeply into the chest as possible | 20/ |
| | Only partly into the chest | |
| | As far back as the throat | |
| | Well back into the mouth, or4 | |
| | _ | |
| | Just pull and don't really draw it in at all | |
| | DON'T KNOW8 | |
| | (SKIP TO Q.63-14, PAGE H-30) | |
| | | |

| FORMER CIGARETTE SMOKER SE | CTION | | |
|---|--------------------------------|--|--------|
| 63-8. How long has it been since | you smoked cigare | ttes fairly regularly? (RECORD NUMBER) | |
| - . | ENTER DAYS: | | 21-22/ |
| | OR WEEKS: | | 23-24/ |
| | OR MONTHS: | | 25-26/ |
| | OR YEARS: | | 27-28/ |
| NEVER SMOKED REGULA | RLY (SKI | P TO Q.63-14, PAGE H-30)1 | 29/ |
| 63-9. On the average, about how ma | any cigarettes a da | y were you smoking at that time? | |
| IF R ANSWERS BY GIVING N MARGIN. THEN MULTIPLY T CIGARETTES SMOKED. | IUMBER OF PACK HE NUMBER OF | IS OF CIGARETTES, RECORD VERBATIM IN PACKS BY 20 AND ENTER THE NUMBER OF | |
| OR WEEKS: OR MONTHS: OR YEARS: OR YEARS: NEVER SMOKED REGULARLY (SKIP TO Q.63-14, PAGE H-30) 1 63-9. On the average, about how many cigarettes a day were you smoking at that time? IF R ANSWERS BY GIVING NUMBER OF PACKS OF CIGARETTES, RECORD VERBATIM IN MARGIN. THEN MULTIPLY THE NUMBER OF PACKS BY 20 AND ENTER THE NUMBER OF CIGARETTES SMOKED. ENTER NUMBER OF CIGARETTES: OR WEEKS: OR WEEKS: OR WOOTH STATE OF THE STATE OF TH | | 30-31/ | |
| (IF NOT | EVERY DAY:) # | PER MONTH | 32-33/ |
| | OR | | |
| (IE NOT | EVERY DAV:\ 4 | PER VEAR | 34-35/ |

| 63-10. SHOW PARTICIPANT HAND CARD R. How long had you been smoking (NUMBER IN Q.6 | 3-9) |
|---|------|
| cigarettes (per day/per week/per month)? | |

| Less than 2 years01 | 36-37/ |
|---|---------|
| 2-5 years02 | |
| 6-10 years03 | |
| 11-15 years | |
| 16-20 years | |
| 21-25 years | |
| 26-30 years | |
| 31-35 years | |
| 36-40 years | ı |
| More than 40 years | 38-57/R |
| 63-11. What type of cigarettes were they? Were they (READ EACH PAIR TOGETHER) | * |
| CODE ONE NUMBER | 58/ |
| A. Filter tip or | |
| Non-filter tip? | |
| CODE ONE NUMBER B. Regular size | 59/ |
| King size or2 | |
| 100 Millimeter? | 60/R |

| 63-12. During the period when you were smoking the most heavily on a regular basis, cigarettes did you usually smoke in a day? | about how many |
|--|-----------------------------|
| ENTER NUMBER PER DAY | 61-62/ |
| (IF NOT EVERY DAY:) # PER MONTH | 63-64/ |
| OR (IF NOT EVERY DAY:) # PER YEAR | 65-66/ |
| A. When was that? | |
| MONTH YEAR | 67-70/ |
| то | |
| MONTH YEAR | 71-74/ |
| 63-13. SHOW PARTICIPANT HAND CARD T. When you smoked cigarettes, how deep Would you say: | ply did you usually inhale? |
| As deeply into the chest as possible | 1 75/ |
| Only partly into the chest | 2 |
| As far back as the throat | 3 |
| Well back into the mouth, or | 4 |
| Just puff and don't really draw it in at all | 5 |
| DON'T KNOW | 8 |

| CURRENT PIPE SMOKER | SECTION | |
|-------------------------------|---|-------------|
| 63-14. During your entire lif | fe, have you smoked at least as many as 50 pipefuls of tobacco? | |
| - . | YES1 | 76/ |
| | NO (SKIP TO Q.63-25, PAGE H-35) 2 | |
| 63-15. Do you now smoke | a pipe? | |
| | YES1 | 77/ |
| | NO (SKIP TO Q.63-20, PAGE H-32) 2 | |
| 63-16. About how many ave | erage sized pipefuls of tobacco do you usually smoke in a day? | |
| | | |
| ENTER NU | IMBER OF PIPEFULS OF TOBACCO: | 78-79/ |
| | BEG | IN DECK 53 |
| | (IF NOT EVERY DAY:) # PER MONTH | 10-11/ |
| | OR | |
| | (IF NOT EVERY DAY:) # PER YEAR | 12-13/ |
| | IT HAND CARD R. For how many years have you been smoking (NUMB //per month/per year)? | ER IN Q.63- |
| | Less than 2 years01 | 14-15/ |
| | 2-5 years02 | |
| | 6-10 years03 | |
| | 11-15 years | |
| | 16-20 years | |
| | 21-25 years | |
| | 26-30 years | |
| | 31-35 years | |
| | 36-40 years | |
| | More than 40 years | |

| 63-18. During the period when you were smoking the most heavily, about how many usually smoke in a day? | pipefuls of tobacco did you |
|---|-----------------------------|
| ENTER NUMBER PER DAY | 16-17/ |
| (IF NOT EVERY DAY:) # PER MONTH | 18-19/ |
| (IF NOT EVERY DAY:) # PER YEAR | 20-21/ |
| A. When was that? | |
| | |
| MONTH YEAR | 22-25/ |
| ТО | |
| MONTH YEAR | 26-29/ |
| 63-19. SHOW PARTICIPANT HAND CARD T. When you smoke a pipe, how deeply Would you say: | do you usually inhale? |
| As deeply into the chest as possible | 1 30/ |
| Only partly into the chest | 2 |
| As far back as the throat | 3 |
| Well back into the mouth, or | 4 |
| Just puff and don't really draw it in at all | 5 |
| DON'T KNOW | 8 |
| SKIP TO Q.63-25, PAGE H-35 | |
| | |

| FORMER PIPE SMOKER SECTION | | | | |
|---|-----------------|---------------|-------------------------|------------|
| 63-20. How long has it been since you smo | ked a pipe fai | rty regularly | ? (RECORD NUMBER) | |
| EN T | TER DAYS: | | | 31-32/ |
| OR | WEEKS: | |] | 33-34/ |
| OR | MONTHS: | | | 35-36/ |
| OR | YEARS: | |] | 37-38/ |
| NEVER SMOKED REGULARLY | (SKIP | TO Q.63-2 | 25, PAGE H-35) | 1 39/ |
| 63-21. On the average, about how many pip | pefuls of tobac | co a day w | ere you smoking at that | time? |
| ENTER NUMBER OF PIPE | FULS OF TO | BACCO: | PER DAY | 40-41/ |
| (1 | IF NOT EVER | Y DAY:) | # PER MO | NTH 42-43/ |
| (1 | IF NOT EVER | Y DAY:) | OR PER YEA | AR 44-45/ |

| 63-22. SHOW PARTICIPANT HAND CARD R. | For how long did you smoke (NUMBER IN Q.63-21) pipefuls of |
|---------------------------------------|--|
| tobacco (per day/per week/per month)? | |

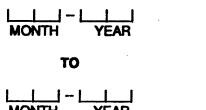
| Less than 2 years01 | 46-47/ |
|----------------------|---------|
| 2-5 years02 | |
| 6-10 years | |
| 11-15 years | |
| 16-20 years | |
| 21-25 years | |
| 26-30 years | |
| 31-35 years | |
| 36-40 years | |
| More than 40 years10 | 48-56/R |

63-23. During the period when you were smoking the most heavily on a regular basis, about how many pipefuls of tobacco did you usually smoke in a day?

| ENTER NUMBER PER DAY | 57-58 / |
|---------------------------------|----------------|
| (IF NOT EVERY DAY:) # PER MONTH | 59-60/ |
| OR | |
| (IF NOT EVERY DAY:) # PER YEAR | 61-62/ |

A. When was that?

FROM



63-66/

67-70/

| HOW PARTICIPANT HAND CARD T. Jould you say: | . When you smoked a pipe, how deeply did you usually inhale? | | |
|--|--|---|-----|
| As deeply into the chest as possible | | 1 | 71/ |
| Only partly into the chest | | 2 | |

Well back into the mouth, or4

B-178

16:18 pm

| CURRENT CIGAR SMOKER SECTION | |
|---|--------|
| 63-25. During your entire life have you smoked at least as many as 50 cigars? | |
| Yes1 | 72/ |
| No | |
| 63-26. Do you now smoke cigars? | |
| Yes1 | 73/ |
| No (SKIP TO Q.63-32, PAGE H-38) 2 | |
| 63-27. On average, about how many cigars a day do you now smoke? | |
| ENTER NUMBER OF CIGARS: PER DAY | 74-75/ |
| (IF NOT EVERY DAY:) # PER MONTH | 76-77/ |
| (IF NOT EVERY DAY:) # PER YEAR | 78-79/ |

| 63-28. | SHOW PARTICIPA cigars (per day/per | ANT HAND CARD R. For how many years have you been smo r month/per year)? | king (# in Q.63- | -27) |
|--------|---------------------------------------|---|------------------|--------|
| | | Less than 2 years | . 01 | 10-11/ |
| | → . | 2-5 years | . 02 | |
| | | 6-10 years | . 03 | |
| | | 11-15 years | . 04 | |
| | | 16-20 years | . 05 | |
| | | 21-25 years | . 06 | |
| | | 26-30 years | . 07 | |
| | | 31-35 years | | |
| | | 36-40 years | . 09 | |
| | | More than 40 years | . 10 | |
| 63-29. | During the period void you usually sm | when you were smoking the most heavily on a regular basis, ab toke in a day? | out how many o | igars |
| | | ENTER NUMBER PER DAY | | 12-13/ |
| | | (IF NOT EVERY DAY:) # PER MONTH OR | | 14-15/ |
| | | (IF NOT EVERY DAY:) # PER YEAR | · | 16-17/ |
| A | A. When was that? | | | |
| | | FROM | | |
| | | MONTH YEAR | · | 18-21/ |
| | | то | | |
| | | MONTH YEAR | 1 | 22-25/ |

| 63-30. SHOW PARTICIPANT HAND CARD T. When you smoke cigars, how deeply do you usually Would you say: | inhale? |
|--|---------|
| As deeply into the chest as possible1 | 26/ |
| Only partly into the chest | |
| As far back as the throat | |
| Well back into the mouth, or4 | |
| Just puff and don't really draw it in at all | |
| DON'T KNOW8 | |
| 63-31. What type of cigars do you usually smoke? | |
| CODE ONE NUMBER Filter tip or | 27/ |
| Non-filter tip? | |

SKIP TO Q. 63-38, PAGE H-40

| FORMER CIGAR SMOKER SECTION | |
|---|--------------------|
| 63-32. How long has it been since you smoked cigars farily regularly? | 28/R |
| ENTER DAYS: | 29-30/ |
| OR WEEKS: | 31-32/ |
| OR MONTHS: | 33-34/ |
| OR YEARS: | 35-36/ |
| NEVER SMOKED REGULARLY (SKIP TO Q.63-38, | PAGE H-40) 1 37/ |
| 63-33. On the average, about how many cigars a day were you smo | king at that time? |
| ENTER NUMBER OF CIGARS: | ER DAY 38-39/ |
| (, | ER MONTH 40-41/ |
| (IF NOT EVERY DAY:) # | ER YEAR 42-43/ |
| | |

| 63-34. SHOW PARTICIPAN cigars per day? | NT HAND CARD R. For how long did you smoke (NUMBER PER DAY | IN Q.63-33) |
|---|---|-------------|
| | Less than 2 years01 | 44-45/ |
| , | 2-5 years02 | |
| | 6-10 years03 | |
| | 11-15 years | |
| | 16-20 years | |
| | 21-25 years | |
| | 26-30 years | |
| | 31-35 years | |
| | 36-40 years | |
| | More than 40 years | 46-54/R |
| 63-35. What type of cigars of | did you usually smoke just before you stopped smoking cigars regularly? |) |
| Filter tip or | CODE ONE NUMBER1 | 55/ |
| • | 2 | 56/R |
| · | en you were smoking the most on a regular basis, about how many ciga | |
| usually smoke in a da | | iis did you |
| | ENTER NUMBER PER DAY | 57-58/ |
| | (IF NOT EVERY DAY:) # PER MONTH | 59-60/ |
| | OR | |
| | (IF NOT EVERY DAY:) # PER YEAR | 61-62/ |
| A. When was that? | FROM | |
| | <u> </u> | |
| | MONTH YEAR | 63-66/ |
| | TO | |
| | MONTH YEAR | 67-70/ |
| | | |

| 63-37. | SHOW PARTICIF Would you say: | PANT HANE | CARD T. | When you smoked a cigar, he | ow deeply did you usual | ly inhale? |
|--------|--------------------------------|---------------|-----------------|---------------------------------|-------------------------|-------------|
| | As deeply into | the chest a | s possible | | 1 | 71/ |
| | Only partly into | the chest . | | | 2 | |
| | As far back as | the throat . | · • • • • • • • | | 3 | |
| | Well back into | the mouth, | or | | 4 | |
| | Just puff and d | on't really d | Iraw it in at | all | 5 | |
| | DON'T KNOW | | | | 8 | |
| 63-38. | DOES R CURRE PAGE E-3; Q.6C | , PAGE E-1 | 0; OR Q.8 | | | |
| | | | | | | 72/ |
| | | NO | | (SKIP TO Q.63-40, BELC |)W)2 | |
| 63-39. | Does your (spous | e/partner) s | smoke regu | larly any of the following? Doe | es she smoke ? | |
| | | YES | NO | DON'T KNOW | | |
| | Cigarettes | 1 | 2 | 8 | | 73/ |
| | Cigars | 1 | 2 | 8 | | 74/ |
| | Pipe | 1 | 2 | 8 | | 7 5/ |
| 63-40. | Approximately how | w much sm | oke is ther | e in the air in your home? | | |
| | | A lot . | | | 1 | 76/ |
| | | A little | | | 2 | |
| | | NONE | | (SKIP TO Q.63-42, PAGE | E H-41) 3 | |

| 63-41 | smoke in your home | NI HAND CARD V. Approximately how many hours a week are yo ? | u exposed to this |
|--------|--------------------------------------|---|----------------------|
| | | 10 hours or less | 77/ |
| | - | 11 to 15 hours | |
| | | 16 to 20 hours | |
| | | 21 to 25 hours | · |
| | | 26 or more hours | |
| 63-42 | DOES R WORK? IS SECTION C. Q.1F, | S "YES" CODED AT SECTION B, Q.4, PAGE B-5 OR "CURRENT , PAGE C-2? | |
| | | YES1 | BEGIN DECK 55 10/ |
| | | NO (SKIP TO Q.64, PAGE H-43) 2 | |
| | A. Approximately he example, your ca | ow much smoke is there in the air in the transportation you take to ar, the train, the bus, etc.? | and from work for |
| | | A lot | 11/ |
| | | A little | |
| | | NONE (SKIP TO Q.63-44, BELOW) | |
| 63.43. | SHOW PARTICIPAN smoke? | T HAND CARD V. Approximately how many hours a week are you | exposed to this |
| | | 10 hours or less1 | 12/ |
| | | 11 to 15 hours | |
| | | 16 to 20 hours | |
| | | 21 to 25 hours | |
| | | 26 or more hours | 13-14/R |
| 63-44. | Approximately how m | uch smoke is there in the air where you work? | |
| | | A lot | 15/ |
| | | A little | |
| | | NONE | |

63-45. SHOW PARTICIPANT HAND CARD V. Approximately how many hours a week are you exposed to this smoke?

| 10 hours or less | 16/ |
|------------------|-----|
| 11 to 15 hours | |
| 16 to 20 hours | |
| 21 to 25 hours | |
| 26 or more hours | |

| YES1 | |
|--|------------|
| | 21/ |
| NO (SKIP TO Q.65, PAGE H-44) 2 | |
| 64A. Have you ever been convicted of a felony since (DATE OF LAST INTERVIEW)? | |
| YES1 | 22/ |
| NO (SKIP TO Q.65, PAGE H-44) 2 | |
| 64B. How many felonies have you been convicted of? | |
| ENTER NUMBER: | 23-24/ |
| 64C. What month and year were you convicted of (this/your first) felony? | |
| MONTH YEAR 64D. On what charge wre you convicted? | 25-28/ |
| | 29-30/ |
| 64E. HAS R EVER BEEN CONVICTED OF A SECOND FELONY? IS # IN Q.64B EQUAL TO 2 OR | - MORE? |
| YES1 | 31/ |
| NO (SKIP TO Q.65, PAGE H-44) 2 | |
| 64F. What month and year were you convicted of this second felony? | |
| | |
| MONTH YEAR | 32-35/ |
| 64G. On what charge were you convicted? | |
| · | 36-37/ |
| | |
| 64H. HAS R EVER BEEN CONVICTED OF A THIRD FELONY? IS # IN Q.64B EQUAL TO 3 OR MC | RE? |
| YES (GO TO NEW QUEX) | 38/ |
| NO | |

| 65 . | Next, I'd like some information about drinking alcoholic beverages. Have you had any alcoholic beer, wine, or liquor, since (DATE OF LAST INTERVIEW)? | olic beverages, |
|-------------|---|-----------------|
| | YES1 | 39/ |
| | NO (SKIP TO LIFETIME DRINKING HISTORY SECTION, PAGE H-52) 2 | |
| 6 6. | Since (DATE OF LAST INTERVIEW) have you had a drink of beer? | |
| | YES1 | 40/ |
| | NO (SKIP TO Q.72, PAGE H-46) 2 | |
| 67. | SHOW PARTICIPANT HAND CARD Z. How long has it been since your last drink of beer? | |
| | Today | 41-42/ |
| | 1-7 days ago02 | |
| | 8-14 days ago | |
| | 15-30 days ago | |
| | 1 month ago | |
| | 2-3 months ago | |
| | 4-6 months ago | |
| | 7-12 months ago | |
| | More than 1 year ago | |
| 68 . | As you think back over the period of time between (DATE OF LAST INTERVIEW) and now, cans or bottles of beer would you drink on a typical day when you drank beer? | about how many |
| | ENTER NUMBER OF CANS OR BOTTLES: | 43-44/ |

| 69. | SHOW PARTICIPANT HAND CARD AA. Again, thinking back over the period of time between (DATE O'LAST INTERVIEW) and now, about how regularly did you drink beer? PROBE IF NECESSARY: It's sometimes hard to remember. Just give me your best guess. | F |
|-----|---|---------|
| | Most often than once a day | 5-46/ |
| | Every day | |
| | 5 or 6 days a week | |
| | 3 or 4 days a week | |
| | 1 or 2 days a week | |
| | Less often than once a week | |
| | DON'T KNOW | |
| 70. | SHOW PARTICIPANT HAND CARD BB. How large were the cans or bottles that you usually drank? | |
| | Standard 12 oz. cans or bottles | 47/ |
| | 16 oz. (half quart) cans or bottles | |
| | 32 oz. (full quart) cans or bottles | |
| | Less than 12 oz. cans or bottles | |
| | More than 32 oz. cans or bottles5 | |
| | Don't drink cans or bottles of beer6 | |
| 71. | SHOW PARTICIPANT HAND CARD CC. During the last 12 months that you drank since (DATE OF LAST NTERVIEW), how often did you have 8 or more cans of beer in a single day, that means 3 quarts or more | Γ ∋? |
| | Every day or nearly every day | -49/ |
| | 3-4 times a week | |
| | Once or twice a week | |
| | 1-3 times a month | |
| | 7-11 times a year | |
| | 3-6 times a year | |
| | Once or twice a year | |
| | Never | |

| 72. Since (DATE OF LAST INTERVIEW) have you had a drink of wine? | |
|---|----------------|
| Yes1 | 50/ |
| No (SKIP TO Q.77, PAGE H-47)2 | |
| 73. SHOW PARTICIPANT HAND CARD Z. How long has it been since your last drink of wine? | |
| Today | 51-52/ |
| 1-7 days ago02 | |
| 8-14 days ago | |
| 15-30 days ago | |
| 1 month ago | |
| 2-3 months ago | |
| 4-6 months ago07 | |
| 7-12 months ago | |
| More than 1 year ago | |
| 74. As you think back over the period of time between (DATE OF LAST INTERVIEW) and now, glasses/bottles of wine would you drink on a typical day when you drank wine? | about how many |
| 3 or more bottles | 53/ |
| 2 bottles | • |
| About 1 bottle (7 - 8 wine glasses) | |
| 5 - 6 wine glasses (3 water glasses) | |
| 3 - 4 wine glasses (2 water glasses) 5 | |
| 1 - 2 wine glasses (1 water glass)6 | 54/R |

| 75. SHOW PARTICIPANT HAND CARD AA. Again, thinking back over the period of time between (DA LAST INTERVIEW) and now, about how regularly did you drink wine? PROBE IF NECESSARY: I sometimes hard to remember. Just give me your best guess. | | een (DATE OF SARY: It's |
|--|--|----------------------------|
| | More often than once a day | 55/ |
| | Every day2 | |
| | 5 or 6 days a week | |
| | 3 or 4 days a week4 | |
| | 1 or 2 days a week5 | |
| | Less often than once a week | |
| | IF CANNOT DECIDE: DON'T KNOW | |
| 76. | SHOW PARTICIPANT HAND CARD CC. During the last 12 months that you drank since (INTERVIEW), how often did you have 8 or more glasses of wine in a single day (more than | DATE OF LAST a fifth)? |
| | Every day or nearly every day | 56-57/ |
| | 3-4 times a week | |
| | Once or twice a week | |
| | 1-3 times a month | |
| | 7-11 times a year | |
| | 3-6 times a year | |
| | Once or twice a year | |
| | Never | |
| 7. | Since (DATE OF LAST INTERVIEW) have you had a drink containing liquor, such as whiske brandy, etc.? | y, vodka, gin, |
| | YES1 | 58/ |
| | NO (SKIP TO Q.83, PAGE H-49) 2 | · |

| 78 . | SHOW PARTICIPANT HAND CARD Z. How long has it been since your last drink of hard liquor? | |
|-------------|---|---|
| | Today | / |
| | 1-7 days ago | |
| | 8-14 days ago | |
| | 15-30 days ago | |
| | 1 month ago05 | |
| | 2-3 months ago | |
| | 4-6 months ago | |
| | 7-12 months ago | |
| | More than 1 year ago | |
| 79. | As you think back over the period of time between (DATE OF LAST INTERVIEW) and now, about how many drinks of hard liquor would you drink on a typical day in which you drank hard liquor? 1 BOTTLE = 17 DRINKS | |
| | ENTER NUMBER OF DRINKS: 61-62 | 1 |
| 80. | SHOW PARTICIPANT HAND CARD AA. Again, thinking back over the period of time between (DATE OF LAST INTERVIEW) and now, about how regularly did you drink hard liquor? PROBE IF NECESSARY: It's sometimes hard to remember. Just give me your best guess. | |
| | More often than once a day 1 63. | / |
| | Every day2 | |
| | 5 or 6 days a week | |
| | 3 or 4 days a week4 | |
| | 1 or 2 days a week 5 | |
| | Less often than once a week6 | |
| | DON'T KNOW | |
| | | |

| 81. SHOW PARTICIPANT F you usually drink? | HAND CARD DD. About how many ounces of hard liquor are there in the drinks | that |
|--|---|-------|
| | One ounce (one shot) | 64/ |
| - : | 1.5 ounces (one jigger) | |
| | 2 ounces (2 shots) | |
| | 3 ounces (2 jiggers or 3 shots) | |
| | 4 ounces (4 shots) | |
| | 5 or more ounces (3 or more jiggers)6 | |
| | Don't know | |
| 82. SHOW PARTICIPANT H INTERVIEW), how often more? | IAND CARD CC. During the last 12 months that you drank since (DATE OF LA did you have 8 or more drinks of hard liquor in a single day, that is a half pint of | ST |
| | Every day or nearly every day | 5-66/ |
| | 3-4 times a week | |
| | Once or twice a week | |
| | 1-3 times a month | |
| | 7-11 times a year05 | |
| | 3-6 times a year06 | |
| | Once or twice a year07 | |
| | Never | |
| 83. Have you had a drink of I | beer, wine or hard liquor in the last 12 months? | |
| | Yes1 | 67/ |
| | NO (SKIP TO LIFETIME DRINKING HISTORY SECTION, PAGE H-52) 2 | |

84. SHOW PARTICIPANT HAND CARD EE. About how often during the past 12 months did you drink enough to feel high -- (that is, happier or more carefree than usual, maybe a little flushed or dizzy,) but not drunk, for more than 24 hours in a row, that is, for more than one full day?

| 5 or more times | 68-69 / |
|--|----------------|
| 4 times | |
| 3 times | |
| 2 times | |
| Once | |
| Never in the past year, but sometime before that | |
| Never in my life | |

85. Now I would like to ask you some questions about experiences that many people have had with drinking. During the past year . . .

| | YES | NO | |
|----|---|----|-----|
| A. | Have you felt aggressive or angry while drinking? 1 | 2 | 70/ |
| В. | Have you gotten into a heated argument while drinking? 1 | 2 | 71/ |
| C. | Have you gotten into a fight while drinking?1 | 2 | 72/ |
| D. | Have you deliberately tried to cut down or quit drinking, but didn't manage to do so? | 2 | 73/ |
| E. | Were you afraid you might be an alcoholic or that you might become one?1 | 2 | 74/ |
| F. | Once you started drinking, was it difficult for you to stop before you became completely intoxicated? | 2 | 75/ |
| G. | Have you awakened the next day not being able to remember things you had done while drinking? | 2 | 76/ |
| H. | Have you often taken a drink the first thing when you got up in the morning? | 2 | 77/ |
| i. | Have your hands shaken a lot the morning after drinking? 1 | 2 | 78/ |
| J. | Have you sometimes gotten drunk when drinking by yourself? 1 | 2 | 79/ |
| Κ. | Have you sometimes kept on drinking after promising yourself not to? | 2 | 80/ |

| 86. | . HAS R WORKED THE PAST YEAR? | |
|-------------|--|----------------|
| | YES 1 | 10/ |
| | NO (SKIP TO Q.87, BELOW) 2 | |
| | During the past year: YES NO | |
| | A. Have you stayed away from work because of a hangover? 1 | 11/ |
| | B. Have you gotten drunk when on the job? | 12/ |
| | C. Have you lost a job, or nearly lost one, because of drinking? 1 2 | 13/ |
| | D. Has drinking led to your quitting a job? 2 | 14/ |
| | E. Has drinking hurt your chances for promotion or raises or a better job? | 15/ |
| 87. | When you were growing up, do you think your father drank occasionally, drank frequently, h problem, or didn't he drink? | ad a drinking |
| | Drank occasionally1 | 16/ |
| | Drank frequently2 | |
| | Had a drinking problem3 | |
| | Didn't drink4 | |
| | DON'T KNOW | |
| 88 . | When you were growing up, do you think your mother drank occasionally, drank frequently, I problem, or didn't she drink? | nad a drinking |
| | Drank occasionally1 | 17/ |
| | Drank frequently | |
| | Had a drinking problem3 | |
| | Didn't drink | |
| | DON'T KNOW 8 | |

LIFETIME DRINKING HISTORY SECTION

USE THESE DIRECTIONS TO COMPLETE THE ANSWER SHEET FOR LIFETIME DRINKING HISTORY. IF PARTICIPANT WAS LAST INTERVIEWED IN 1987/1988, USE DATE OF LAST INTERVIEW. OTHERWISE, ASK ABOUT TIME SINCE BEGAN DRINKING REGULARLY.

Now I am going to ask you questions about your drinking history. I'd like to start with [the year that you first began drinking regularly (i.e., at least once a month / the period since (DATE OF LAST INTERVIEW)], and work forward to the present. Please give me information as accurately as you can about what type of beverage you were drinking, how much and how often.

(FIRST) STAGE

Question A H 1.1 To begin I'm going to ask you about your drinking pattern [during the first year that you began to have at least one drink per month/since (DATE OF LAST INTERVIEW)]. [How old were you when you began regular drinking . . . approximately how old? / How old were you at the time of the last interview?] RECORD THE AGE ON THE ANSWER SHEET

TYPE

Question A H 1.2 [During the first year that you began to have at least one drink per month / Since (DATE OF LAST INTERVIEW)], what types of beverages would you usually consume in an average month? About what percentage of your drinking would be . . .? RECORD THE RELATIVE PERCENTAGES OF BEER, HARD LIQUOR OR WINE.

THIS SECTION SHOULD ADD UP TO 100%

QUANTITY

Question A H 1.3 When you drank about how much did you usually drink?

One drink (approximately) = 12 oz Beer

One drink (approximately) = 1.5 oz Liquor (40 % Alcohol)

One drink (approximately) = 5 oz Wine

One drink (approximately) = 3 oz Fortified Wine (e.g., Sherry)

One drink (approximately) = 17 ml Absolute Alcohol One drink (approximately) = 13.6 g Absolute Alcohol

RECORD THE AVERAGE NUMBER OF DRINKS PER OCCASION

Question A H 1.4 What is the most or maximum number of drinks you would have in any one day?

RECORD THE MAXIMUM NUMBER OF DRINKS. NOTE, THIS IS THE MAXIMUM NUMBER THAT THE PERSON ACTUALLY WOULD DRINK, NOT AN ESTIMATE OF HIS POTENTIAL CAPACITY.

FREQUENCY

Question A H 1.5 How many days per month would you generally drink (AVERAGE NUMBER OF DRINKS FROM A H 1.3.)? RECORD THE NUMBER OF DAYS UNDER THE FREQUENCY HEADING.

LIFETIME DRINKING HISTORY SECTION

USE THESE DIRECTIONS TO COMPLETE THE ANSWER SHEET FOR LIFETIME DRINKING HISTORY. IF PARTICIPANT WAS LAST INTERVIEWED IN 1987/1988, USE DATE OF LAST INTERVIEW. OTHERWISE, ASK ABOUT TIME SINCE BEGAN DRINKING REGULARLY.

Now I am going to ask you questions about your drinking history. I'd like to start with [the year that you first began drinking regularly (i.e., at least once a month / the period since (DATE OF LAST INTERVIEW)], and work forward to the present. Please give me information as accurately as you can about what type of beverage you were drinking, how much and how often.

(FIRST) STAGE

Question A H 1.1 To begin I'm going to ask you about your drinking pattern [during the first year that you began to have at least one drink per month/since (DATE OF LAST INTERVIEW)]. [How old were you when you began regular drinking . . . approximately how old? / How old were you at the time of the last interview?] RECORD THE AGE ON THE ANSWER SHEET.

TYPE

Question A H 1.2 [During the first year that you began to have at least one drink per month / Since (DATE OF LAST INTERVIEW)], what types of beverages would you usually consume in an average month? About what percentage of your drinking would be . . .? RECORD THE RELATIVE PERCENTAGES OF BEER, HARD LIQUOR OR WINE.

THIS SECTION SHOULD ADD UP TO 100%

QUANTITY

Question A H 1.3 When you drank about how much did you usually drink?

One drink (approximately) = 12 oz Beer

One drink (approximately) = 1.5 oz Liquor (40 % Alcohol)

One drink (approximately) = 5 oz Wine

One drink (approximately) = 3 oz Fortified Wine (e.g., Sherry)

One drink (approximately) = 17 ml Absolute Alcohol One drink (approximately) = 13.6 g Absolute Alcohol

RECORD THE AVERAGE NUMBER OF DRINKS PER OCCASION

Question A H 1.4 What is the most or maximum number of drinks you would have in any one day?

RECORD THE MAXIMUM NUMBER OF DRINKS. NOTE, THIS IS THE MAXIMUM NUMBER

THAT THE PERSON <u>ACTUALLY</u> WOULD DRINK, NOT AN ESTIMATE OF HIS POTENTIAL CAPACITY.

FREQUENCY

Question A H 1.5 How many days per month would you generally drink (AVERAGE NUMBER OF DRINKS FROM A H 1.3.)? RECORD THE NUMBER OF DAYS UNDER THE FREQUENCY HEADING.

STYLE

Question A H 1.6 How would you rate your usual style of drinking in an average month? Was it . . .? (READ APPROPRIATE CATEGORIES. CIRCLE ONE).

BLANK = ABSTINENT

1 = Occasional (LESS THAN 15 DAYS).

2 = Weekends mainly.

3 = At least 3 days heavy drinking in a period of time (BINGE

DRINKING)

= Frequent (15 OR MORE DRINKS PER MONTH).

LIFE EVENTS

Question A H 1.7 Did any important event or events occur during this period that altered your usual drinking habits? EXAMPLES ARE: LOSS OF SPOUSE, MEDICAL PROBLEMS, UNEMPLOYMENT, PRISON TERM, HOSPITALIZATION. RECORD THESE EVENTS BY CODING ALL THAT APPLY. IF NO IMPORTANT EVENT OCCURRED THAT INFLUENCED THE PERSON'S DRINKING BEHAVIOR, THEN LEAVE THIS SECTION BLANK

Question A H 1.8 What was your perception of this event? Would you say that it had a positive (+) or negative (-) effect on your life? RECORD "+" OR "-" BEFORE THE LIFE EVENT. IF NO (NEUTRAL) EFFECT, LEAVE BLANK.

CONTEXT

Question A H 1.9a

What percentage of the time would you drink alone?

Question A H 1.9b

What percentage of the time with at least one other person?

(RECORD THE APPROPRIATE VALUES BESIDE ALONE AND WITH OTHERS. THIS

SECTION SHOULD ADD UP TO 100%

TIME

Question A H 1.10

During what time of the day would you do most of your drinking? Could you give me the percentage of time during the evening, afternoon and morning? (RECORD THE APPROPRIATE VALUES BESIDE MORNING, AFTERNOON AND EVENING. THIS SECTION SHOULD ADD TO 100%)

SUBSEQUENT PHASES

Instruction A:

We have just discussed your drinking habits [at the point when you first began to drink regularly/since (DATE OF LAST INTERVIEW)]. Now I want you to think of when your drinking behavior was different in a significant way from this time. This could be the next 6 months or perhaps 2 or 5 years. Can you think of any events in your life that changed and may have altered your drinking habits (increased/decreased) at any time in your life? Events such as attending high school, college, enlisting, Vietnam, deaths in family, change of jobs.

ESTABLISH WHEN THE PERSON'S DRINKING BEHAVIOR FIRST CHANGED IN A <u>SIGNIFICANT</u> WAY FROM THAT RECORDED UNDER FIRST STAGE. SINCE THIS DRINKING HISTORY IS AIMED AT <u>MAJOR TRENDS</u>, SOME JUDGEMENT WILL BE NECESSARY IN DIFFERENTIATING IMPORTANT FROM MINOR CHANGES IN DRINKING PATTERNS. FILL IN THE AGE RANGE WHEN THE BEHAVIOR CHANGED UNDER SECOND STAGE, AND REPEAT THE QUESTIONS FOR TYPE, QUANTITY, FREQUENCY, STYLE, LIFE EVENTS, CONTEXT, AND TIME.

Instruction B:

PROBE FURTHER INTO THE PERSON'S HISTORY TO NOTE CHANGES IN DRINKING BEHAVIOR. MAKE SURE THAT ALL THE YEARS ARE COVERED FROM THE YEAR WHEN THE INDIVIDUAL FIRST STARTED DRINKING ON A REGULAR BASIS (AT LEAST ONCE A MONTH) TO HIS PRESENT AGE <u>OR</u> FROM THE DATE OF LAST INTERVIEW TO NOW. AFTER CONDUCTING THE INTERVIEW, CARE SHOULD BE TAKEN TO ENSURE THAT ALL SECTIONS ARE COMPLETE AND THAT THE AGE RANGE RUNS IN A CHRONOLOGICAL SEQUENCE WITH NO OVERLAP OR AGE GAPS.

EXAMPLE:

Participant started drinking at 16. He drank very little for 4 years.

At age 20, he drank a lot more, and more liquor than beer. He did this for 10 years.

At age 30, he decreased his drinking to only weekends. He did this type of drinking for 12 years.

At age 42, he quit drinking completely. He is 50 years old.

FIRST STAGE: From age 16 to 20.
SECOND STAGE: From age 20 to 30.
THIRD STAGE: From age 30 to 42.

FOURTH STAGE: From age 42 to present (50 yrs).

STYLE

Question A H 1.6 How would yolu rate your usual style of drinking in an average month? Was it . . .? (READ APPROPRIATE CATEGORIES. CIRCLE ONE).

BLANK = ABSTINENT

1 Occasional (LESS THAN 15 DAYS).

Weekends mainly.

3 At least 3 days heavy drinking in a period of time (BINGE DRINKING)

Frequent (15 OR MORE DRINKS PER MONTH).

LIFE EVENTS

Question A H 1.7 Did any important event or events occur during this period that altered your usual drinking habits? EXAMPLES ARE: LOSS OF SPOUSE, MEDICAL PROBLEMS, UNEMPLOYMENT. PRISON TERM, HOSPITALIZATION. RECORD THESE EVENTS BY CODING ALL THAT APPLY. IF NO IMPORTANT EVENT OCCURRED THAT INFLUENCED THE PERSON'S DRINKING BEHAVIOR, THEN LEAVE THIS SECTION BLANK

Question A H 1.8 Deleted SEE GREEN CARDS

CONTEXT

Question A H 1.9a What percentage of the time would you drink alone?

Question A H 1.9b What percentage of the time with at least one other person?

(RECORD THE APPROPRIATE VALUES BESIDE ALONE AND WITH OTHERS. THIS

SECTION SHOULD ADD UP TO 100%

TIME

Question A H 1.10 During what time of the day would you do most of your drinking? Could you give me the percentage of time during the evening, afternoon and morning? (RECORD THE APPROPRIATE VALUES BESIDE MORNING, AFTERNOON AND EVENING. THIS SECTION SHOULD ADD TO 100%)

SUBSEQUENT PHASES

Instruction A:

We have just discussed your drinking habits [at the point when you first began to drink regularly/since (DATE OF LAST INTERVIEW)]. Now I want you to think of when your drinking behavior was different in a significant way from this time. This could be the next 6 months or perhaps 2 or 5 years. Can you think of any events in your life that changed and may have altered your drinking habits (increased/decreased) at any time in your life? Events such as attending high school, college, enlisting, Vietnam, deaths in family, change of jobs.

ESTABLISH WHEN THE PERSON'S DRINKING BEHAVIOR FIRST CHANGED IN A SIGNIFICANT WAY FROM THAT RECORDED UNDER FIRST STAGE. SINCE THIS DRINKING HISTORY IS AIMED AT MAJOR TRENDS, SOME JUDGEMENT WILL BE NECESSARY IN DIFFERENTIATING IMPORTANT FROM MINOR CHANGES IN DRINKING PATTERNS. FILL IN THE AGE RANGE WHEN THE BEHAVIOR CHANGED UNDER SECOND STAGE, AND REPEAT THE QUESTIONS FOR TYPE, QUANTITY, FREQUENCY, STYLE, LIFE EVENTS, CONTEXT, AND TIME.

Instruction B:

PROBE FURTHER INTO THE PERSON'S HISTORY TO NOTE CHANGES IN DRINKING BEHAVIOR. MAKE SURE THAT ALL THE YEARS ARE COVERED FROM THE YEAR WHEN THE INDIVIDUAL FIRST STARTED DRINKING ON A REGULAR BASIS (AT LEAST ONCE A MONTH) TO HIS PRESENT AGE OR FROM THE DATE OF LAST INTERVIEW TO NOW. AFTER CONDUCTING THE INTERVIEW, CARE SHOULD BE TAKEN TO ENSURE THAT ALL SECTIONS ARE COMPLETE AND THAT THE AGE RANGE RUNS IN A CHRONOLOGICAL SEQUENCE WITH NO OVERLAP OR AGE GAPS.

EXAMPLE:

Participant started drinking at 16. He drank very little for 4 years.

At age 20, he drank a lot more, and more liquor than beer. He did this for 10 years.

At age 30, he decreased his drinking to only weekends. He did this type of drinking for 12 years.

At age 42, he quit drinking completely. He is 50 years old.

FIRST STAGE: From age 16 to 20. SECOND STAGE: From age 20 to 30. THIRD STAGE: From age 30 to 42.

FOURTH STAGE: From age 42 to present (50 yrs).

17:04 pm

(ERST STAGE (PHASE)

SECOND

B-202

GRIHT

| | | | ANSWER SHEET LIFETIME DRINKING HISTORY | SHEET ING HISTORY | | Ö ** | DECKS 56-59 |
|---------------------|--------------------|------------------|---|----------------------|--|----------------|--------------------|
| Q.AH1.1 | O.AH1.2 | Q.AH1.3/Q.AH1.4 | O.AH1.5 | OAHIA | | | 18-39/R |
| STAGES AGE RANGE | TYPE | QUANTITY | FREQUENCY . | STYLE | LIFE EVENTS OR CHANGES | CONTEXT | Q.AH1.10 |
| Younger to Older | Percentage % | Drinks/Occasion | Days/Month | Circle One | Code All That Apply | Percentage | Percentace |
| BEGIN DECK 57 FROM | Beer | (1.3) Average | | 1. Occasional | 1 Family | * | × |
| 10 | 18-20 | 27.28 | | 2. Weekends | | a. Alone | Morning |
| 14-15/ | Liquor | (1.4) Maximum | | 3. Heavy/Binge | | | Afternoon |
| | 21-23/ | | 31.32/ | 4. Frequent | 4 Medical 10 Treatment | b. With Others | 55-57/ |
| | Wine | 28-30/ | | 3 | 5 Residence 11 Death | 49-51/ | Evening |
| | T = 100% | | | | 6 Legel-Jail 12 Emotional 34-39/ 40-45/ | T = 100% | 58-60/ |
| BEGIN DECK 58 | | 8.5 | | | | | %001 = 4 |
| FROM 10-13/ | Beer | Average | | 1. Occasional | 1 Family 7 Financial | a. Alone | Morning |
| 70 | 18-20/ Liquor | 27-28/ | | 2. Weekends | 2 Work 8 Peer Group | | 52.54 |
| 30.44 | 21-23/ | (1.4) Maximum | | 3. Heavy/Binge | 3 School 9 Drug Use | 48-48/ | Afternoon |
| | Wine | | 31-32/ | 4. Frequent | 4 Medical 10 Treatment | b. With Others | 55-57/ |
| | 24-26/ T = 100% | 29-30/ | | 3 | 5 Residence 11 Death | 49-51/ | Evening |
| BEGIN DECK RO | | | | | 6 Legal-Jail 12 Emotional 34-39/ 40-45/ | T = 100% | 58-60/ T = 100% |
| FROM 10-13/ | Beer | (1.3) Average | | 1. Occasional | 1 Family 7 Financial | Alora | - |
| 10 | 18-20/ Liquor | 27-28/ | | 2. Weekends | 2 Work 8 Peer Group | | |
| 14-15/ | 21-23/ | (1.4) Maximum | | 3. Heavy/Binge | 3 School 9 Drug Use | | Afternoon |
| | Wine | 8 | 31-32/ | 4. Frequent | 4 Medical 10 Treatment | b. With Others | 25-57 |
| | T = 100% | NS-42 | | | 5 Residence 11 Death | 49-51/ | Evening |
| 1mo - 1 Emo | | | | | 6 Legal-Jail 12 Emotional 34-39/ 40-45/ | T = 100% | 58-60/ T = 100% |

1mo = .1 5mo = .4 9mo = .8 2mo = .2 6mo = .5 10mo = .8 3mo = .3 7mo = .6 11mo = .9 4mo = .3 8mo = .7 12mo = 1.0

1 Drink (approx.) = 12 oz. beer 1.5 oz. liquor 5 oz. wine 3 oz. fortified wine 13.6 o absolute elcohol

Liquor: 1 mickey (12 oz) = 8 Drinks 1 bottle (25 oz) = 17 Drinks

Wine: 1 bottle (25 oz) = 5 Drinks

| ≌ | _ |
|---|-----|
| ğ | |
| Š | |
| × | _ |
| ĕ | ន្ត |
| _ | ≆ |
| | 盍 |
| | ö |
| | * |

ANSWER SHEET LIFETIME DRINKING HISTORY

| Q.AH1.1 | Q.AH1.2 | Q.AH1.3/Q.AH1.4 | O.AH1.5 | a that o | | | | |
|---|--------------------|------------------|---------------------------------|----------------|------------------------|------------------------|-------------------------------------|--------------------|
| STAGES | TYPE | QUANTITY | FREQUENCY | STYLE | LIFE EVENTS OR CHANGES | OB CHANGES | CONTEXT | Q.AH1.10 |
| Younger to Older | Percentage | Drinka/Occasion | Days/Month | Circle One | Code All That Andy | and tell | Decident | |
| BEGIN DECK SO | * | | | | | (1) | * | * |
| | Beer | (1.3) Average | | 1. Occasional | 1 Family | 7 Financial | | |
| 10-13 | 18-20 | | | 2. Weekends | 2 Work | 8 Peer Group | e C | Morning 52 547 |
| 14-15/ | Liquor | (1.4) | | 3. Heavy/Binge | 3 School | 9 Drug Use | 46-48/ | Afternoon |
| | 21-23/ | Maximum | 31-32/ | 4. Frequent | 4 Medical | 10 Treatment | b. With Others | 56.57/ |
| | Wine | 29-30/ | | 8 | 5 Residence | 11 Death | 49-51/ | Evenina |
| | 24-26/ T = 100% | | | | 6 Legal-Jail 34-39/ | 12 Emotional | T = 100% | 58-80 |
| BEGIN DECK 61 | | | | | | 2 | | * On = 1 |
| 10.13 | Beer | (1.3) Average | | 1. Occasional | 1 Family | 7 Financial | a. Alone | Morring |
| <u>!</u> | 18-20/ Liguor | 27.28/ | | 2. Weekends | 2 Work | 8 Peer Group | | 52-54/ |
| 14-15/ | 21-23/ | (1.4) Maximum | | 3. Heavy/Binge | 3 School | 9 Drug Use | 46-48/ | Afternoon |
| | Wine | | 31-32/ | 4. Frequent | 4 Medical | 10 Treatment | b. With Others | 12-59 |
| | 24-26/ T = 100% | 29-30/ | | 3 | 5 Residence | 11 Death | 49-51/ | Evening |
| | | | | | 6 Legal-Jail 34-39/ | 12 Emotional 40-45/ | T = 100% | 58-80/ T = 100% |
| BEGIN DECK 62 | | (1.3) | | | | | | |
| 10-13/ | Beer | Average | | 1. Occasional | 1 Family | 7 Financial | a. Alone | Morning |
| | 18-20/ Liquor | 27-28/ | | 2. Weekends | 2 Work | 8 Peer Group | | NS-29 |
| 14-15/ | 21-23/ | (1.4) Maximum | | 3. Heavy/Binge | 3 School | 9 Drug Use | 48-48/ | Afternoon |
| | Whe | | 31-32/ | 4. Frequent | 4 Medical | 10 Treatment | b. With Others | 25-57/ |
| - | 24-26/ T = 100% | 29-30/ | | 3 | 5 Residence | 11 Death | 49-51/ | Evening |
| | | | | | 6 Legal√Jaii 34-39/ | 12 Emotional 40-45/ | T = 100% | 58-60/ T = 100% |
| =.1 5mo = .4 9mo = .8 =.2 6mo = .5 10mo = .8 | | | 1 Drink (approx.) = 12 oz. beer | | | Liquor: 1 mickey | Liquor: 1 mickey (12 oz) = 8 Drinks | |
| 3mo = .3 7mo = .6 11mo = .9 4mo = .3 8mo = .7 12mo = 1.0 | | | 5 02. Wine | , | |) воре (| (25 oz) = 17 Urinks | |
| | | | 3 02. fortified v | wine | | Wine: 1 bottle (| 1 bottle (25 oz) = 5 Drinks | |

1 Drink (approx.) = 12 oz. beer 1.5 oz. liquor 5 oz. wine 3 oz. fortified wine 13.6 g absolute alcohol

Wine: 1 bottle (25 oz) = 5 Drinks 1 bottle fortified = 8 Drinks

DECKS 63-64

ANSWER SHEET LIFETIME DRINKING HISTORY

| | - HV C | • | | | | | | | | | 1 |
|-------|--|--|-------------|------------------|---|----------------|------------------------|---|--|--------------|-------------|
| | | | C.AH1.2 | Q.AH1.3/Q.AH1.4 | Q.AH1.5 | Q.AH1.6 | ď | O AH1 7 | | | Γ |
| | STAGES AGE RANGE | is VGE | TYPE | QUANTITY | FREQUENCY | STYLE | LIFE EVENTS | LIFE EVENTS OR CHANGES | CONTEXT | Q.AH1.10 | T |
| | Younger to Older | Older | Percentage | Drinka/Occasion | Days/Month | Circle One | Code All | Code All Thee America | | | T |
| | BEGIN DECK 63 | | | | | | | field Child | Percentage | Percentage % | |
| | FROM | 10-13/ | Beer | (1.3) Average | | 1. Occasional | 1 Family | 7 Financial | a. Alone | Morning | 1 |
| ŀ | ъ Г | 44.487 | DZ-81 | 27-28/ | | 2. Weekends | 2 Work | 8 Peer Group | | 52.54 | |
| ЦN | | B | ridinol | (1.4) Meximum | | 3. Heavy/Binge | 3 School | 9 Drug Use | 48-48/ | Afternoon | |
| ZEAE | | | Wine 21-23/ | 8 | 31-32/ | 4. Frequent | 4 Medical | 10 Treatment | b. With Others | 25-57/ | |
| } | | | /96.76 | 0000 | | | 5 Residence | 11 Death | 49-51/ | Evening | , |
| | | | T = 100% | | | | 6 Legal-Jail 34-39/ | 12 Emotional 40-45/ | T = 100% | 58-60/ | |
| | DEGIN DECK 64 | | | | | | | | | * 100% | |
| | FROM | 10-13/ | Beer | (1.3) Average | | 1. Occasional | 1 Family | 7 Financial | a. Alone | Morning | |
| | <u>ا</u> | | Liquor | 27-28/ | | 2. Weekends | 2 Work | 8 Peer Group | | K2.64 | |
| | | \d. 1-4-1 | 21-23 | (1.4) Maximum | | 3. Heavy/Binge | 3 School | 9 Drug Use | 46-48/ | Afternoon | |
| UN | | | WIN | | 31-32/ | 4. Frequent | 4 Medical | 10 Treatment | b. With Others | 55-57/ | |
| _ | | | T = 100% | 28-30/ | - | | 5 Residence | 11 Death | 49-51/ | Evening | |
| لند | | | | | | | 6 Legal-Jali 34-39/ | 12 Emotional 40-45/ | T = 100% | 28-60/ | |
| | 1mo = .1 5mo = .4 2mo = .2 6mo = .5 3mo = .3 7mo = .6 4mo = .3 8mo = .7 | 9mo = .8 10mo = .8 11mo = .9 12mo = 1.0 | | · | 1 Drink (approx.) = 12 oz. beer 1.5 oz. liquor 5 oz. wine | | | Liquor: 1 mickey (12 oz) = 8 Drinks 1 bottle (25 oz) = 17 Drinks | mickey (12 oz) = 8 Drinke 1 botde (25 oz) = 17 Drinks | * | 7 |

1 Drink (approx.) = 12 oz. beer 1.5 oz. liquor 5 oz. wine 3 oz. fortified wine 13.6 g absolute akochol

Liquor: 1 mickey (12 oz) = 8 Drinks 1 bottle (25 oz) = 17 Drinks

Wine: 1 bottle (25 oz) = 5 Drinks 1 bottle fortified = 8 Drinks

| | | AGE | 14-15/ |
|-------------|---|---|---------------|
| 90B | . IF MORE THAN 1 YEA | R AGO: How old were you then? | |
| | | More than 1 year ago (ASK Q.90B) 5 | |
| | | Within last year4 | |
| | | Within last 6 months3 | |
| | | Within last month | |
| | | Still or within last 2 weeks1 | 13/ |
| 90A | How long has it been s | ince you drank 7 or more drinks at least once a week, or do you still? TIME POSSIBLE | |
| | | NO (SKIP TO Q.91, PAGE H-56) 2 | |
| | | YES (ASK Q.90A) | 12/ |
| 90. | [As you think back over been a couple of month beer or 7 glasses of win | the period of time between (DATE OF LAST INTERVIEW) and now], Has the s or more when at least one evening a week, you drank 7 drinks, or 7 bottles e? | re ever of |
| | | More than 1 year ago5 | |
| | · | Within last year4 | |
| | | Within last 6 months3 | |
| | | Within last month | |
| | | Still or within last 2 weeks | 11/ |
| 89A. | How long has it been si CODE MOST RECENT | nce you drank that much or do you still? TIME POSSIBLE | |
| | | NO (SKIP TO Q.90) 2 | |
| | ···· . | YES (ASK Q.89A) | 10/ |
| 89 . | going to ask you some (| CYCLES '85-'86 AND/OR '87-'88, USE THE PHRASES IN BRACKETS. Now questions about using alcohol. [Since (DATE OF LAST INTERVIEW)], Has the work when every day you were drinking 7 or more beers, 7 or more drinking glasses of wine? | ere |

| 91 | . [Since (DATE OF LAS | T INTERVIEW)]/Have you ever told a doctor about a problem you had with d | rinking? |
|-------------|--|--|-------------------|
| | | YES 1 | 16/ |
| | - . , | NO2 | |
| 92 | | T INTERVIEW)]/Have friends, your doctor, your clergyman, or any other profenking too much for your own good? | essional |
| | | YES1 | 17/ |
| | | NO 2 | |
| 93 | . [Again, thinking back o ever wanted to stop dri | ver the period of time between (DATE OF LAST INTERVIEW) and now]/Have inking but couldn't? | ∍ you |
| | | YES1 | 18/ |
| | | NO | |
| 94. | Some people promise their drinking. [Since (I | themselves not to drink before 5 o'clock or never to drink alone, in order to concern to the concern of the con | ontrol |
| | | YES 1 | 19/ |
| | | NO 2 | |
| 95 . | [Since (DATE OF LAST breakfast)? | INTERVIEW)]/Did you ever need a drink just after you had gotten up (that is | s, before |
| | · | YES 1 | 20/ |
| | | NO 2 | |
| 9 6. | | since (DATE OF LAST INTERVIEW) and now]/Have you ever had job or school? | hool |
| | | YES 1 | 21/ |
| | | NO2 | |
| 97. | [Since (DATE OF LAST drinking? | INTERVIEW)]/Did you ever lose a job or get kicked out of school on account | t of |
| | | YES1 | 22/ |
| | | NO2 | |
| 98. | [As you think back over gotten into trouble driving | the period of time between (DATE OF LAST INTERVIEW) and now]/Have you because of drinking like having an accident or being arrested for drunk d | u ever riving? |
| | | YES1 | 23/ |
| | | NO | |
| | | D 006 | |

| 99. | [Since (DATE OF LAST INTERVIEW)]/Have you ever been arrested drinking or for disturbing the peace while drinking? | d or held at the police station because | se of |
|--------------|---|--|-------|
| | YES | 1 | 24/ |
| | NO | 2 | |
| 100. | 00. [Since (DATE OF LAST INTERVIEW)]/Have you ever gotten into p | hysical fights while drinking? | |
| | YES | 1 2 | 25/ |
| | NO | 2 | |
| 101. | 01. [As you think back over the period of time between (DATE OF LAS gone on binges or benders, where you kept drinking for a couple of | T INTERVIEW) and now]/Have you days or more without sobering up? | ever |
| | YES (ASK Q.101A AND C | Ω.101B) 1 | 26/ |
| | NO (SKIP TO Q.102, NE | XT PAGE)2 | |
| 101 <i>A</i> | 01A. Did you neglect some of your usual responsibilities then? | | |
| | YES | 1 2 | 27/ |
| | NO | 2 | |
| 101B | 01B. How many times have you gone on binges or benders that lasted | at least a couple of days? | |
| | | 20 | 8-29/ |
| | # OF BENDERS | | |
| | IF R SAYS 96 OR MORE, CODE 96 AND GO TO Q.102, NEXT P Q.101C. | AGE. IF R SAYS "DON'T KNOW" | ASK |
| 101C | 1C. Was it just once or more often than that? | | |
| | JUST ONCE (RECORD 01 ABOVE MORE THAN ONCE (RECORD 95 ABOVE STILL DON'T KNOW (RECORD 98 ABOVE | ≣) | |

| 102. | • | ST INTERVIEW)]/Have you ever had blackouts while drinking, that is tyou couldn't remember the next day what you had said or done? | s, where you |
|-------|--|---|------------------|
| | | YES 1 | 30/ |
| 4 | * 0.000 miles | NO | |
| 103. | | ST INTERVIEW)]/Have you ever had "the shakes" after stopping or on your hands shake so that your coffee rattles in the saucer or you have | |
| | | YES (SKIP TO Q.104) | 31/ |
| | | NO | |
| 103A | | ST INTERVIEW)]/Have you ever had fits or seizures after stopping o | r cutting down |
| | on drinking? | YES | 32/ |
| | | NO | |
| 103B. | | ST INTERVIEW)]/Have you ever had the DT's (hallucinations and fev | rer) when you |
| | quit drinking? | YES | 33/ |
| | | NO | |
| 103C. | [Since (DATE OF LAS cutting down on drinki | ST INTERVIEW)]/Have you ever seen or heard things that weren't reng? | ally there after |
| | | YES 1 | 34/ |
| | | NO | |
| 104. | | Ith problems that can result form long stretches of pretty heavy drink RVIEW)/Did drinking ever cause you to have? CODE ALL THA | |
| | A. liver disease or ye | llow jaundice | 35/ |
| | B. vomiting blood or o | other stomach troubles2 | 36/ |
| | C. trouble with tingling | g in the limbs3 | 37/ |
| | D. memory troubles w | then you haven't been drinking (not blackouts) 4 | 38/ |
| | E. inflammation of you | ur pancreas or pancreatitis5 | 39/ |
| | F. NONE | 0 | |
| | | n (DATE OF LAST INTERVIEW) and now]/Have you ever continued erious physical illness that might be made worse by drinking? | to drink when |
| | | YES1 | 40/ |
| | | NO2 | |

| 106. | Has there | e ever been nary daily wo | a period in your life [since (DATE OF LAST INTERVIEW)], when you could not ork well unless you had something to drink? | do |
|------|-----------|------------------------------|--|-----|
| | | | YES1 | 41/ |
| | | - . | NO | |

107A. Now I am going to ask you about possible sleep problems. SHOW PARTICIPANT HAND CARD FF. [Since (DATE OF LAST INTERVIEW)]/Would you please look at this card and tell me if you have any of these sleep problems. Other than on this trip, do you routinely have sleep problems such as . . . (READ a-I)?

B. IF YES TO ANY SLEEP PROBLEMS, ASK FOR EACH: How long have you had this problem? (CONVERT INTO MONTHS)

| | A. | B. | C. |
|---|--------------------|-----------------------|---------------------------|
| | CURRENT PROBLEM | HOW LONG IN MONTHS | PAST PROBLEM |
| a. Trouble falling asleep | 1 | | 1 42-46/ |
| b. Waking up during the night | 2 | | 2 47-51/ |
| c. Waking up too early and can't go back to sleep | 3 | | 3 52-56/ |
| d. Waking up unrefreshed | 4 | | 4 57-61/ |
| e. Involuntarily falling asleep during the day | 5 | | 5 62-66/ |
| f. Great or disabling fatique during the day | 6 | | 6 67-71/ |
| g. Frightening dreams | 7 | | 7 72-76/ |
| h. Talking in your sleep | 8 | | BEGIN DECK 66 8 10-14/ |
| i. Sleepwalking | 9 | | 9 15-19/ |
| j. Abnormal movement/activity during the night | 10 | | 10 20-24/ |
| k. Sleep problems requiring medication | 11 | | 11 25-29/ |
| I. Snore loudly in all sleeping positions | 12 | | 12 30-34/ |
| m. IF NO CURRENT SLEEP PROBLEMS, CODE "1" 1 | | | 35/ |

| C. | IF NO TO ANY OF THESE PROBLEMS, ASK: had any of these sleep problems in the past? | Would you please look at this card and tell me if you have CODE ALL THAT APPLY |
|----|---|--|
| | IF NO PAST SLEEP PROBLEMS, CODE "1" . | 1 36/ |

IF R (HAS/HAD) ANY OF THE SLEEP PROBLEMS LISTED IN Q.107 ASK QS.108-110. OTHERS SKIP TO Q.111, PAGE H-61.

108. SHOW PARTICIPANT HAND CARD FF. Did you consult a physician or other health care professional about (EACH SLEEP PROBLEM GIVEN IN Q.107)?

YES

NO

| | | , | | |
|--|--|----------------------------|---------------------------------------|--|
| а | Trouble falling asleep | 1 | 2 | 37/ |
| b | Waking up during the night | 1 | 2 | 38/ |
| С | Waking up too early and can't go back to sleep | 1 | 2 | 39/ |
| d | Waking up unrefreshed | 1 | 2 | 40/ |
| е | involuntarily falling asleep during the day | 1 | 2 | 41/ |
| f. | Great or disabling fatique during the day | 1 | 2 | 42/ |
| g. | Frightening dreams | 1 | 2 | 43/ |
| h. | Talking in your sleep | 1 | 2 | 44/ |
| i. | Sleepwalking | 1 | 2 | 45/ |
| j. | Abnormal movement/activity during the night | 1 | 2 | 46/ |
| k. | Sleep problems requiring medication | 1 | 2 | 47/ |
| I. | Snore loudly in all sleeping positions | 1 | 2 | 48/ |
| | , ,, | | | |
| 109. | Did you take medication to relieve (READ EACH S | SLEEP PROB | LEM GIVI | EN IN Q.107)? |
| 109. | Did you take medication to relieve (READ EACH S | SLEEP PROB | LEM GIVI | EN IN Q.107)? |
| 109. a. | Did you take medication to relieve (READ EACH S | | | EN IN Q.107)? 49/ |
| | · | YES | NO | ŕ |
| a . | Trouble falling asleep | YES 1 | NO 2 | 49/ |
| a. b. | Trouble falling asleep Waking up during the night | YES 1 1 | NO 2 2 | 49/ 50/ |
| a. b. c. | Trouble falling asleep Waking up during the night Waking up too early and can't go back to sleep | YES 1 1 1 | NO 2 2 2 | 49/ 50/ 51/ |
| a. b. c. d. | Trouble falling asleep Waking up during the night Waking up too early and can't go back to sleep Waking up unrefreshed | YES 1 1 1 1 | NO 2 2 2 2 | 49/ 50/ 51/ 52/ |
| a. b. c. d. e. | Trouble falling asleep Waking up during the night Waking up too early and can't go back to sleep Waking up unrefreshed Involuntarily falling asleep during the day | YES 1 1 1 1 1 | NO 2 2 2 2 2 2 | 49/ 50/ 51/ 52/ 53/ |
| a. b. c. d. e. f. | Trouble falling asleep Waking up during the night Waking up too early and can't go back to sleep Waking up unrefreshed Involuntarily falling asleep during the day Great or disabling fatique during the day | YES 1 1 1 1 1 1 | NO 2 2 2 2 2 2 | 49/ 50/ 51/ 52/ 53/ 54/ |
| a. b. c. d. e. f. g. | Trouble falling asleep Waking up during the night Waking up too early and can't go back to sleep Waking up unrefreshed Involuntarily falling asleep during the day Great or disabling fatique during the day Frightening dreams | YES 1 1 1 1 1 1 1 1 | NO 2 2 2 2 2 2 2 | 49/ 50/ 51/ 52/ 53/ 54/ 55/ |
| a. b. c. d. e. f. g. h. | Trouble falling asleep Waking up during the night Waking up too early and can't go back to sleep Waking up unrefreshed Involuntarily falling asleep during the day Great or disabling fatique during the day Frightening dreams Talking in your sleep | YES 1 1 1 1 1 1 1 1 1 | NO 2 2 2 2 2 2 2 2 2 | 49/ 50/ 51/ 52/ 53/ 54/ 55/ |
| a. b. c. d. e. f. g. h. | Trouble falling asleep Waking up during the night Waking up too early and can't go back to sleep Waking up unrefreshed Involuntarily falling asleep during the day Great or disabling fatique during the day Frightening dreams Talking in your sleep Sleepwalking | YES 1 1 1 1 1 1 1 1 1 1 | NO 2 2 2 2 2 2 2 2 2 2 2 | 49/ 50/ 51/ 52/ 53/ 54/ 55/ 56/ 57/ |
| a. b. c. d. e. f. g. h. i. j. | Trouble falling asleep Waking up during the night Waking up too early and can't go back to sleep Waking up unrefreshed Involuntarily falling asleep during the day Great or disabling fatique during the day Frightening dreams Talking in your sleep Sleepwalking Abnormal movement/activity during the night | YES 1 1 1 1 1 1 1 1 1 1 1 | NO 2 2 2 2 2 2 2 2 2 2 2 2 2 | 49/ 50/ 51/ 52/ 53/ 54/ 55/ 56/ 57/ 58/ |

| 110. | Did (EACH SLEEP | PROBLEM | GIVEN IN Q.107, | PAGE H-59) | interfere with yo | our life? |
|------|-----------------|----------------|-----------------|-------------------|-------------------|-----------|
|------|-----------------|----------------|-----------------|-------------------|-------------------|-----------|

| | | YES | NO | |
|----|--|-----|----|-----|
| a. | Trouble falling asleep | 1 | 2 | 61/ |
| b. | Waking up during the night | 1 | 2 | 62/ |
| C. | Waking up too early and can't go back to sleep | 1 | 2 | 63/ |
| d. | Waking up unrefreshed | 1 | 2 | 64/ |
| e. | Involuntarily falling asleep during the day | 1 | 2 | 65/ |
| f. | Great or disabling fatique during the day | 1 | 2 | 66/ |
| g. | Frightening dreams | 1 | 2 | 67/ |
| h. | Talking in your sleep | 1 | 2 | 68/ |
| i. | Sleepwalking | 1 | 2 | 69/ |
| j. | Abnormal movement/activity during the night | 1 | 2 | 70/ |
| k. | Sleep problems requiring medication | 1 | 2 | 71/ |
| I. | Snore loudly in all sleeping positions | 1 | 2 | 72/ |
| | | | | |

111. ASK THIS QUESTION FOR EVERYONE. On the average, how many hours do you sleep per night?

| HOLL | PS. | |
|------|-----|--|

73-74/

SECTION I: RECREATION, LEISURE, AND PHYSICAL ACTIVITIES

FOR THIS SECTION YOU WILL NEED:

- THE INTERVAL SUPPLEMENTAL RECORDING BOOK (LS.R.B.)
- · CALENDAR

10-17/R

1. Now we would like you to answer some questions about your leisure time activities. Have you ever participated three or more times in (READ EACH ITEM)?

| YE | es no | |
|--|-------|------|
| Scuba diving | 2 | 18/ |
| Auto, boat, or motorcycle racing | 2 | 19/ |
| Skydiving1 | 2 | 20/ |
| Mountain climbing | 2 | 21/ |
| Hang gliding | 2 | 22/ |
| Plane racing or plane acrobatics, not including flight training or any assignments for the | | |
| Armed Forces | 2 | 23/ |
| Surf board riding | 2 | 24/ |
| Sailing long distance in small sailing craft | 2 | 25/ |
| Skiing fast down a high mountain slope | 2 | 26/ |
| | | 27/R |

SKIP TO GUS 62 IN US.R.B. ON PAGE 15.

SECTION J. TOXIC SUBSTANCES

FOR THIS SECTION YOU WILL NEED

- HAND CARD E

| Have any of the recreation, leisure, and/or physical activities you've participated in since (DATE OF LAST INTERVIEW) brought you in contact with any of the following substances? | 1A. FOR EACH SUBSTANCE CODED YES, ASK A THROUGH D. Since (DATE OF LAST INTERVIEW), in what month and year did your recreation, leisure and/or physical activities first bring you in contact with (SUBSTANCE)? | 1B. Since (DATE OF LAST INTERVIEW), for how many years did you continue to come in contact with (SUBSTANCE)? |
|--|--|--|
| YES NO Asbestos? | MONTH YEAR 29-32/ | YEARS 33-34/ |
| Industrial Chemicals? | MONTH YEAR 36-39/ | YEARS 40-41/ |
| Insecticides or Pesticides? | L L MONTH YEAR 43-46/ | YEARS 47-48/ |
| Degreasing Chemicals? | LLLL MONTH YEAR 50-53/ | YEARS 54-55/ |
| Defoliants or Herbicides? | LLI LI MONTH YEAR 57-60/ | YEARS 61-62/ |
| X-ray or Nuclear Radiation? | MONTH YEAR 64-67/ | YEARS 68-69/ |

1. (Continued)

| | | | 1 I |
|--|--|--|---|
| 1C. Since (DATE OF LAST INTERVIEW), how many days per year did you come in contact with (SUBSTANCE)? | 1D. On the days you came in contact with (SUBSTANCE) how often did you use protective clothing or gear or wash to remove (SUBSTANCE)all of the time, some of the time, or never? | 1E. SHOW PARTICIPANT HAND CARD E. Which of the following did you use? CODE ALL THAT APPLY. | |
| DAYS 70-72/ | 73/ All of the time(ASK E) | Air Filter | 74, 75, 76, 77, 78, 79, 80, |
| DAYS BEGIN DECK 68 10-12/ | 13/ All of the time(ASK E) | Air Filter | 14/ 15/ 16/ 17/ 18/ 19/ 20/ |
| DAYS 21-23/ | 24/ All of the time(ASK E) | Air Filter | 25/ 26/ 27/ 28/ 29/ 30/ 31/ |
| DAYS 32-34/ | 35/ All of the time(ASK E) | Air Filter | 36/ 37/ 38/ 39/ 40/ 41/ 42/ |
| DAYS 43-45/ | 46/ All of the time(ASK E) | Air Filter | 47/ 48/ 49/ 50/ 51/ 52/ 53/ |
| DAYS 54-56/ | 57/ All of the time(ASK E) | Air Filter | 58/ 59/ 60/ 61/ 62/ 63/ 64/ |

SECTION K: INCOME

FOR THIS SECTION YOU WILL NEED

HAND CARD GG.

1. Now I have some questions about your income. SHOW PARTICIPANT HAND CARD GG. Please tell me which letter on this card best represents the total household income in 1991 before taxes or other deductions for all people in your household, not including roomers. This amount should include wages, net income from business, interest, dividends, pensions, and any other money income. Tell me the letter that comes closest.

65/R 66-67/ A. B. C. D. E. F. G. H. I. J. K. L. M. N. O. P. Q. R. S. T.

| 2. | - | any in | come from any job du | ıring 1991? I | Do not include in | come from | retirement plai | ns or |
|-------------|-----------------|-----------|---|---------------|----------------------|---------------------------------------|------------------------------|-------------------|
| | pensions. | YES | | . (ASK Q.2A |) | | 1 | 68/ |
| | - | NO. | | (SKIP TO Q | 3) | | 2 | |
| 2A. | fall that is, I | oefore | NT HAND CARD GG. taxes or other deduct EQUAL TO OR LESS | tions? Tell m | ne the letter that o | your earni come close | ngs from jobs st. THE AMO | in 1991 UNT IN |
| | | A. | \$5,000 - \$9,999 | | •••••• | | 01 | 69-70/ |
| | | В. | \$10,000 - \$14,999 | | | | 02 | |
| | | C. | \$15,000 - \$19,999 | | | | 03 | |
| | | D. | \$20,000 - \$24,999 | | ••••• | • • • • • • • • • • • • • • • • • • • | 04 | |
| | | E. | \$25,000 - \$29,999 | | | | 05 | |
| • | | F. | \$30,000 - \$34,999 | | | | 06 | |
| | | G. | \$35,000 - \$39,999 | | | | 07 | |
| | | H. | \$40,000 - \$44,999 | | | | 08 | |
| | | I. | \$45,000 - \$49,999 | | | | 09 | |
| | | J. | \$50,000 - \$54,999 | | | | 10 | |
| | | K. | \$55,000 - \$59,999 | | | | 11 | |
| | | L. | \$60,000 - \$64,999 | | | | 12 | |
| | | M. | \$65,000 - \$69,999 | | | | 13 | |
| | | N. | \$70,000 - \$74,999 | | | | 14 | |
| | | Ο. | \$75,000 - \$79,999 | | ••••• | | 15 | |
| | | P. | \$80,000 - \$84,999 | | | | 16 | |
| | | Q. | \$85,000 - \$89,999 | | | | 17 | |
| | | R. | \$90,000 - \$94,999 | | | | 18 | |
| | | S. | \$95,000 - \$99,999 | | | | 19 | |
| | | T. | \$100,000 or more . | | | | 20 | |
| 3 a. | HAVE PARTII | PANT | COMPLETE DIETAR | Y ASSESSM | ENT FORM. | | | • |

| | Air Force Health Study (#4563) th Interval Questionnaire | | Page K-3 |
|-------------|---|-------|----------|
| 3 b. | INTERVIEWER: | | |
| | RECORD TIME ENDED | AM AM | 71-74/ |

INTERVIEWER REMARKS

INTERVIEWER: Please complete these remarks as soon as you have finished the questionnaire.

| 1. | Length of the interview: | | |
|------------|--|------------|------|
| | MINUTES | 75- | -77/ |
| | | BEGIN DECK | 69 |
| 2. | Date of the interview: MONTH DAY YEAR | 10- | 15/ |
| 3. | Race of Respondent: | | |
| | White | 1 . | 16/ |
| | Black | 2 | |
| | Other | 3 | |
| 4. | In general, what was the respondent's attitude toward the interview? | | |
| | Friendly and interested | 1 1 | 17/ |
| | Cooperative but not particularly interested | 2 | |
| | Impatient and restless | 3 | |
| | Hostile | 4 | |
| 5 . | In general, was the respondent's understanding of the questions | | |
| | Good? | 1 18 | 8/ |
| | Fair? | 2 | |
| | Poor? | 3 | |

| 6. | | ns that confused, angered, respondent did not answer | or caused discomfort to the respondent or querturthfully. EXPLAIN. | estions that |
|----------------|-----------------------------|--|--|----------------|
| | · | NONE | | 19/ |
| | - . , | Section | Question | |
| | | A. 20-21 | | 22-26/ |
| | | В. 27-28 | | 29-33/ |
| | | C. 34-35 | 5/ | 36-40/ |
| Des | scribe Problem: | | | 1 |
| 7. | List questions didn't work. | XPLAIN. | that were confusing to you, or questions that | |
| | | NONE | Question | 42/ |
| | - | A. 43-44 | | 5- 49 / |
| | | B50-51 | , | :-56/ |
| | | c57-58 | 59 | -63/ |
| Des | cribe Problem: | | | 64/ |
| | | | | |
| 8. | Please record y | our interviewer ID #: | | 65-70/ |
| 9. | Please sign you | ır name here: | | |
| 10. | PRINT THE RE | SPONDENT'S FULL NAME | | N DECK 70 |
| | FIRST | | MIDDLE | 10-39/ |
| | LAST | | | 40-59/ |

LOG OF AUTHORIZATION FORMS TO BE RETURNED TO AIR FORCE BY PARTICIPANT

| Ver | A fication | Vari | B lication | С | D | E Q.# where | |
|-----|----------------|----------|---------------|-----------|--|----------------|--|
| On | | | | Condition | Doctor or | | |
| | ticipant | | | | to be | Facility Info | |
| Col | ndition | Cor | dition | Name | Verified | is recorded | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | eng a piling in ing manggap | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | | - | | |
| Y | N | Y | N | | | | |
| Y | N | Y | N | - | | | |
| Y | N | Y | N | | - | | |

INFORMATION SHEET 05/13/92 1992 AIR FORCE HEALTH STUDY

| CASE-ID | | | |
|--------------------------|------------------------|---------------|--------|
| RESPONDENT | | | |
| SOCIAL SECURITY NUMBER | | | 1 |
| DATE OF LAST INTERVIEW | | | |
| 01 DATE OF BIRTH | | • | l |
| 02 DEGREE LAST OBTAINED | r | | 1 |
| 03 MILITARY STATUS | : Discharged, Retired | d or Separate | |
| BRANCH | : Non-active Duty | | |
| COUNTRY | : | | |
| DATE OF ASSIGNMENT | • | | - |
| 04A SPOUSES/PARTNERS NAM | MED IN ROUND III : *** | **** | |
| 04 MARITAL STATUS AT LAS | ST INTERVIEW : Mai | ried | |
| 05 PARTNER AT LAST INTER | RVIEW? (ID#/NAME): No | | |
| 06 SPOUSE AT LAST INTERV | /IEW? (ID#/NAME): Yes | i | |
| 07 SPOUSES/PARTNERS SING | CE LAST INTERVIEW: | | |
| | | | |
| LAST | FIRST | MIDDLE | MAIDEN |
| | | | |
| | | | |
| | ****** | | |
| | | | |

case-10 : Respondent: CHILDREN'S RECORD FORM

Respondent's Biological Children

(Interviewer: Please emphasize these are his *natural* children)

| DEF | 2 | 2 |
|-----------------------------------|-----|-----|
| 87+ DEF | YES | YES |
| 85+ DEF | | |
| 82+ DEF | | |
| 80+ DEF | | |
| 900 | | |
| 800 | | |
| S | | |
| Last | | |
| First | | |
| Mother's Child's First id Id Name | | |
| Mother's 1d | | |

her's Name

)+, 82+, 85+ DEF - 'YES': BIRTH DEFECT, OR LEARNING DISABILITY, OR PHYSICAL, MENTAL, OR MOTOR IMPAIRMENTS HAVE BEEN REPORTED ISG) : INFORMATION MISSING

. . NONE OF THESE

7+ DEF - PREPRINT 'YES' AND 'NO!

B-222

PRIVACY ACT STATEMENT—EPIDEMIOLOGIC STUDY

AUTHORITY: Section 133, 1071-87, 3012, 5031 and 8012, Title 10, United States Code and Executive Order 9397.

PRINCIPAL AND PURPOSE(S): The purpose of requesting personal information is to assist medical/technical personnel in developing records relative to your participation in an approved epidemiologic investigation. The Social Security (SSN) and Armed Forces Service Number (AFSN) are necessary to identify the person and records.

ROUTINE USES: This information will be used to initiate, coordinate, and conduct the investigation. It will be used to compile statistical data, but information allowing identification of the individual volunteer will not be included. Data and results from this investigation may be used to supplement other approved research studies conducted at the USAF School of Aerospace Medicine or at other Federal agencies engaged in the conduct of similar studies.

WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY, AND EFFECT ON INDIVIDUAL FOR NOT PROVIDING INFORMATION: Disclosure or requested information is voluntary. If the information is not furnished, acceptance as a subject is not possible. This is an all-inclusive Privacy Act Statement which will apply to all request for personnel during the time you are a volunteer subject. A copy of this form will be placed in your investigation subject folder as evidence of this notification.

Your signature merely acknowledges that you have been advised of the foregoing. If requested, a copy of this form will be furnished to you.

| | | | |
|------------------------|------|-----|--------------|
| Signature of Volunteer | AFSN | SSN | DATE |





DEPARTMENT OF THE AIR FORCE USAF SCHOOL OF AEROSPACE MEDICINE (AFSC) Authorization Form BROOKS AIR FORCE BASE. TEXAS 78235

Participant Medical

AUTHORIZATION FOR RELEASE OF MEDICAL INFORMATION

| Patient's Name: | | | • |
|---|--|---|---|
| Social Security Number: | | • | |
| Name of Doctor: | | • • | |
| Name of Facility: | | | |
| Address of Facility: | | | - |
| | | • | |
| | | | |
| Condition: | | Date of Medical | Care: |
| Condition: | | Date of Medical | Care: |
| Condition: | | Date of Medical | Care: |
| Condition: | | Date of Medical | Care: |
| Southeast Asia. Part of veterans and their faming As a participant in this which was provided during and/or physical examina Privacy Act of 1974. Notatistical aggregate of Public. | lies. s study, medical informing a personal interviention. The data will loo individually recogni | emation is needed to ew, self-administer be maintained in co izable data will be | o validate data ed questionnaire, mpliance with the released. Only |
| You are hereby authoriz | ed and requested to re | elease the complete | clinical record |
| to: | USAFSAM/EKEO | | |
| | Brooks AFB TX 78235 Attn: Mr. Vince Elec | quin | |
| The authorization is nu expressed revocation, a except to the extent th | ilthough it may be revo | oked by the undersi, | gned at any time |
| Witness: | | Date Signed: | |
| Signature: | | | |
| Case ID#:!! | | | |

AFTER COMPLETING AUTHORIZATION FORMS, CONTINUE FILLING OUT QUESTIONNAIRE

HEALTH CARE PROVIDER FORM SECTION F: CHILD AND FAMILY HEALTH

Š

| 1 2 3 | What is the child's name? | 8 | What is (CHILD'S) date of birth? | | |
|-------------|---|---------------------------|--|------------------|---|
| 1 1 | Last | | MILL DILL YILL | | |
| 1122 | ls (CHILD'S) defect or disability best described as a learning disability, phys | isability, physical or mo | sical or motor impairment, mental impairment, cancer, or birth detect? (CIRCLE APPROPRIATE NUMBER) | ith defect? (Cli | RCLE APPROPRIATE NUMBER) |
| | Learning disability Physical or motor impairment Mental impairment Cencer Birth defect | - 01 03 4 PO | | | |
| COLUMN | COLUMN 1: What is the name and address of the medical facility and doctor(s) who first described (diagnosed) the child's cancer, defect, or disability? | COLUMN 2: TP | COLUMN 2: THE DIAGNOSIS ITSELF 32-A What iswas the diagnosis? (PROBE: That is, the doctor's description of the center deleter or | COLUMN | COLUMN 8: What is the name and address of the medical facility and doctor(s) who LAST sew the child about the cancer, defect or disability? |
| | Facility Name: | | disability.) | | MEDICAL FACILITY AND DOCTOR NFORMATION IS THE SAME FOR THE FIRST |
| 31-A | | | |] | AND LAST VISITS, CHECK BOX, GO TO NEX HEALTH CARE PROVIDER FORM. |
| | Building: | | | | • IF BOX IS NOT CHECKED, COMPLETE PHYSICIAN/FACILITY INFORMATION BELOW |
| 4-1€ | | | | | |
| | Street: | | | 88- | Facility Name: |
| 31-A | City State Zin Code | <u>.</u> | in what month and year did the doctor(s) FIRST | 33-A | Building: |
| | | 92-B | describe the cancer, defect, or disability? | ¥-88 | Straet: |
| 6 | Physician Name: | <u>.</u> | In what month and year did the child LAST see | | City State Zip Code |
| <u> </u> | Physician Name: | i S | 32-C M Y | 33-B | Physician Name: |
| 3.0 | | | | စ္တ | Physician Name: |

B-225

- IF OTHER CANCERS, BIRTH DEFECTS, OR DISABILITIES FOR THIS CHILD, FILL OUT ANOTHER HEALTH CARE PROVIDER FORM. 98

1992 AIR FORCE HEALTH STUDY (#4563)

CHILDREN'S SUPPLEMENTAL RECORD FORM

| DATE OF DEATH | | | | | | | |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|
| CONDITION | | | | | | | |
| MOTHER'S ID # | | | | | | | |
| MOTHER'S MAIDEN NAME | | | | | | | |
| DATE OF BIRTH AGE | CIRCLE: |
| SEX (M/F) | | | | | | | |
| FULL NAME | | | | | | | - |
| CHILD'S ID# | | | | | | | |

| 1992 | Air | Forc | 9 |
|-------|-----|------|---------|
| Healt | h S | tudy | (#4563) |

| ١ | I | | | | | |
|---|-------|-----|-------|----------|--|--|
| | | CAS | - 11) | | | |

SELF-ADMINISTERED FORM 2 RESIDENCE HISTORY (FROM PAGE G-7 IN INTERVAL QUEX)

We would like you to tell us all the places you've lived since you were born. Please list all the places you've lived for more than 12 months starting with the first place since birth.

| CITY/TOWN | STATE | COUNTRY | # YEARS |
|--|---------------------------------------|---|--|
| • | | COUNTRY | · - |
| Chicago | IL . | | 6 |
| A. What is the name of the (first/next) city or town you lived in for more than 12 months since birth? | B. What state is that in? | C. What country is that in? (IF OTHER THAN USA) | D. How many years did you live there |
| CITY/TOWN | STATE | COUNTRY | # YEARS |
| 1. | | | |
| 2. | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8. | | | |
| 9 | | | |
| 10 | . 1 1 1 | | |

| A. What is the name of the (first/next) city or town you lived in for more than 12 months since birth? | B. What state is that in? | C. What country is that in? (IF OTHER THAN USA) | D. How many years did you live there? |
|--|---------------------------------------|---|---------------------------------------|
| CITY/TOWN | STATE | COUNTRY | # YEARS |
| | | | |
| 11. | | | |
| 12. | | | |
| 13. | | | |
| 14. | | | |
| 15. | | | |
| 16 | | | |
| 17. | | | |
| 18. | | | |
| 19. | | | |
| | | | |
| 20 | | | |

| С | D | Ε | F | G |
|---------------------------------|---|---|--|--|
| Do you have (CONDITION) now? | Are you currently taking any prescribed medicines for your (CONDITION)? | What are the names of medicines you are taking? Any others? | When did <u>you last consult</u> <u>a doctor</u> for (CONDITION) between (DATE OF LAST INTERVIEW) and now? | What is the full name and address of the doctor or medical facility you last consulted? IF DIFFERENT DOCTOR FROM B, COMPLETE MEDICAL AUTHORIZATION FORM. |
| YES 1 NO 2 26/ | YES | 1) | MONTH YEAR 37-40/ | PHYSICIAN'S LAST NAME A1/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE INTERVIEWER: BEFORE ASKING ABOUT THYROID PROBLEMS, SKIP TO Q.IS25 IN I.S.R.B. PAGE 7. |
| YES | YES | 1) | MONTH YEAR 53-56/ | PHYSICIAN'S LAST NAME 57/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

INTERVIEWER: ASK A THROUGH G FOR EACH CONDITION CODED YES.

| | | Α | В |
|---|---------|--|---|
| Since (DATE OF LAST INTERVIEW) It told you for the first time that you had. | | Between (DATE OF LAST INTERVIEW) and now, in what month and year did a doctor first tell you that you had (CONDITION)? | What is the full name and address of the doctor who first made the diagnosis or the medical facility where the diagnosis was first made? REVIEW MEDICAL AUTHORIZATION FORMS. IF FORM NOT COMPLETED FOR THIS DOCTOR, COMPLETE FORM NOW. |
| 10-11/ | 1 2 12/ | MONTH YEAR 13-16/ | PHYSICIAN'S LAST NAME 17/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |
| 18-19/ | | MONTH YEAR 21-24/ | PHYSICIAN'S LAST NAME 25/ FIRST NAME OR FACILITY NAME STREET ADDRESS CITY STATE |

| | | | CASE ID: |
|-----|--|------------|------------------------------|
| 92 | Air Force Health Study (#4563) | | SELF-ADMINISTERED FORM |
| IN. | TERVIEWER: CODE ONE | | |
| PE | RIOD 11 RIOD 22 10/ RIOD 33 | | BEGIN DECK |
| | SIDE A: FOR YOU | | |
| car | ere are many reasons that some couples find it difficult or impossind and circle the number on Side A for each reason which applied asons appropriate for your spouse. Circle as many responses as a | to you for | this period. Side B provides |
| Fo | r each reason, please record the year this occurred or became kn | own to you | • |
| A. | Vasectomy 01 | 11-12 | YEAR: 19 13-14/ |
| В. | Prostatectomy 02 | 15-16/ | 19 17-18/ |
| C. | Sterility due to other surgery (PLEASE SPECIFY) | | |
| D. | 03 21/ Sterility due to injury, accident, or illness (PLEASE SPECIFY) | 19-20/ | 19 22-23/ |
| | 04 | 24-25/ | 19 |
| Ε. | Impotence | 29-30/ | 19 31-32/ |
| F. | Other medical or physical condition (PLEASE SPECIFY) | | |
| | 06 | 33-34/ | 19 36-37/ |
| G. | Sterility due to unknown causes | 38-39/ | 19 40-41/ |
| Н. | No reason applies to me; reasons only apply to my spouse | 42-43/ | |
| | PLEASE USE SIDE B FOR REASONS FOR YOUR SPOUSE | APPROPR | IATE |

SELF-ADMINISTERED FORM 1

SIDE B: FOR YOUR SPOUSE

Please circle the number on Side B for each reason which applied to <u>your spouse</u> for this period. Circle as many responses as appropriate.

For each reason, please record the year this occurred or became known to you.

| A. | Tubal ligation | 01 | 44-45 | YEAR: 19 | 46-47/ |
|----|--|-----|--------|----------|----------------|
| В. | Hysterectomy | 02 | 48-49/ | 19 | 50-51/ |
| C. | Infertility due to other surgery (PLEASE SPECIFY) | _ | | | |
| | 54/ | _03 | 52-53/ | 19 | 55-56/ |
| D. | Infertility due to injury, accident, or illness (PLEASE SPECIFY) | _ | | | |
| | 59/ | _ | 57-58/ | 19 | 60-61/ |
| Ε. | Other medical or physical condition (PLEASE SPECIFY) | _ | | | |
| | 64/ | _05 | 62-63/ | 19 | 65-66 / |
| F. | Infertility due to unknown causes | 06 | 67-68/ | 19 | 69-70/ |
| 3. | No reason applies to my spouse; reasons only apply to me | 07 | 71-72/ | | |

INSTRUCTIONS

Please use an ordinary No. 2 pencil to answer all questions. Fill in the appropriate response circles completely, write requested information in the boxes provided. The form is designed to be read by optical-scanning equipment, so it is important that you make NO STRAY MARKS and keep any write-in responses WITHIN the spaces provided. Should you need to change a response, erase the incorrect mark completely. If you have any comments, please write them on a separate piece of paper.

EXAMPLE 1.

MARK YOUR AVERAGE USE
OF EACH SPECIFIC FOOD
FOR A PERIOD OF TIME
REQUESTED. FOR EXAMPLE,
IF A FOOD SUCH AS TOMATOES
IS EATEN 4 TIMES A WEEK
DURING THE APPROXIMATE
3 MONTHS THAT IT IS IN
SEASON, THEN THE AVERAGE
USE WOULD BE ONCE PER WEEK.

| | ·. ^ · · | | . 7 | | | | 22 | 2.1 | -2. | |
|---|----------|------------|-----|----|-----|----------------------|-----------------|-----------------|-----------------|---|
| VEGETABLES | | | 븦 | Ä | | | | | | Ē |
| Tometoes (1) or Tometo pice (med gleen) | 1Q | <u>.Q.</u> | 묫 | XI | X | 8 | 12 | I X` | X | |
| String beens (1/2 cup) | - 0 | Q. | 8 | XI | X | 8 | X | IX. | X | |
| Broccoli (1/2 cup) | -19 | <u>.y.</u> | 2 | X | X- | ┡╬╌ | I X | HX- | X− | |
| Cabbage, caufiflower, or Brussels sprouts (1/2 cup) | 10 | N. | 8 | X | Ν. | & - | X- | I X | X | |
| Cerrors, sew (1/2 cerror or 2-4 sticle) | -12 | N. | 8 | X. | IX. | 18 | X- | ا≺ ۱ | X | П |
| Carrots, cooled (1/2 cup) | 10 | 0 | | | ١٧ | ۳ | ١٧ | 1 | ١٧ | |

EXAMPLE 2.

KEEP HANDWRITING WITHIN BORDERS OF THE RESPONSE BOX. What kind of cold breakfast cereal do you usually use? (e.g. Kelloggs Cracklin Oat Bran)

| _ (| 3 . | Which cold breakfast cereal do you | Specify brand and type | |
|-----|------------|------------------------------------|----------------------------|--|
| _ | | usually eat? | Kelloggs Cracklin Oat Bran | |
| | | O Don't eat cold breakfast cereal | | |
| | | _ | | |

EXAMPLE 3. MARK "YES" OR "NO" AND THE NUMBER OF YEARS AND DOSE OF A VITAMIN PREPARATION

| Zinc? | How many years? | ○0-1 yr. | 2-4 years | ○ 5-9 years | O 10+ years | O know |
|--|--------------------|------------------------|------------------|----------------------|-----------------------|--------------|
| ○ No ② Yes | What dose per day? | O Less than 25 mg. | O 25 to 74 mg. | O 75 to . 100 mg. | 101 mg. or more | O Don't know |
| Calcium? (Include Calcium in Dolomite and Turns, etc.) | How many years? | O-1 yr. | 2-4 years | ○ 5-9 years | 0 10+ years | O know |
| No Yes HYES, | What dose per day? | O Less than 400 mg. | O 400 to 900 mg. | O 901 to 1300 mg. | O 1301 mg. or more | O Don't know |

THANK YOU FOR COMPLETING THE FOOD FREQUENCY QUESTIONNAIRE.

| | | | | | DIET | ASSE | SSM | NT | | | | | | | | | |
|-----------------------|--------------------|--------------|----------------|-------------------------------------|---------------------------------------|------------------|--------------------|----------------------|----------------|---------------|---------------|--------------|-------------------------|--------------|-------------|-------------------|-------------|
| | | | | K | 9099 | 900 | ന ര | | 000 | 000 | 000 |) (a)(c) | വര | ര | ര | റെ | |
| ID: | | | | K | 9000 | 300 | 700 | 0 | 000 | 00 | 000 | 0(0 | 000 | 000 | 0 | 000 | 0 |
| | | | | | <u> </u> | | | | | | 000 | | | | | | |
| 1. Do you cu | rently take | | | | ease report i <u>n</u> lany do you | | | under que or less | |) 6-9 | | | | | |)))) | |
| ON ₀ | O 165 | <u>!! }!</u> | <u>12</u> , e) | per we | ek? | | → Ö3 | | = |) 10 or | more | | | | | | |
| | | | b) | | specific bran | | | | | | | | | | | | |
| - | - | | | | ually use? - | | | | | | | 500 | cify ex | act bra | nd and | type | |
| 2 Not count | | e vitami | 15, 60 | you u | Ke Bry Or | the tot | lowing | preparau | ons: | | | | | | | | |
| a) Vitamin A? | _ | | | | How many | <i>,</i> →0 | 0-1 yr. | O2- | 4 yrz | C |) 5-9 y | 13. | 010 |)+ A12 | |) Don't know | - |
| ONO | Yes, sea | | } | Yes. | What dos | • →0 | Less the | n ()8. | 000 to | . C | 13.00 | 00 to | | 3.000 I | υ <u>C</u> |) Don't | |
| | | | | | l per day? | | 8.000 IL | | 2.000 | | | | | more | | know | |
| b) Vitamin C? | Yes, sea | econal conty | ì | H . | How many | , → 0 | 10-1 yr. | Oz. | 4 yrs. | ٠ (|) 5-9 y | rs. | 010 |)+ A12 | · | Don't know | |
| | O Yes, mo | • | } | Yes. | What dos | • -0 | Less the | n 04 | 00 to | C | 750 1 1250 | to The | 013 | 300 mg | · C | Don't know | |
| c) Vitamin Be | 7 | • | , Maria | many | | | 0-1 yr. | | 4 yrs | |) 5-9 v | | |)+ yrs | | Don t | |
| ONo | ' ○ Yes → | H ves. | _ | | per day? | ŏ | Less the | n ()1 |) to | |) 40 to |) | O 80 |) mg | |) know) Don't | - - |
| d) Vitamin E? | | | | | | | 10 mg. | | 9 mg. | | 79 m | | | more | | Don't | |
| ONO | O Yes → | If was | | many t | yeers? - | = 8 | 0-1 yr. | n ()10 | 4 yrz 00 to | → |) 5-9 y | 10 | | 0+ yrs | |) know) Don't | _ |
| - | | | | | | | 100 IU | 2 | 50 IÚ | | 500 (| Ů | | mare | | Don't | |
| e) Seienium? | • | | | many | | <u></u> 0 | 0-1 yr. | | 4 yrs. | _ |)5-9 y | | _ | 0+ yrs | |) know | |
| 0.00 | O Yes → | 17 Y93. | Wh | 1 0000 | per day? | $\overline{}$ | 80 mcg | | 30 mcc | | 140 250 | | | More more | | Don't know | |
| f)iron? | | | How | many | years? - | —,0 | 0-1 yr. | O 2 | 4 yrz | |) 5-9 y | 17 <u>2</u> | O 10 | 0+ yrs | . (| Don't know | |
| ONO | O Y == → | M yes | Whi | nt does | per day? | →0 | Lees the 51 mg. | | 1 to 00 ma | _ | 201 | | | 01 mg. | |) Dan't | |
| g) Zinc? | | | Hone | meny | veers? - | \rightarrow | 0-1 yr. | | 4 yrs | |) 5-9 v | | | O+ yes | | Don't know | |
| ONo | O Yes → | H Yes | | | per day? | | Less the | n 02 | 5 to 4 mg | $\overline{}$ | 75 to |) | 01 | 01 mg | | Don t | |
| h) Calcium? | Brando Co | ilian . | 4 14 | | ww. | |) 0-1 yr. | | 4 7/3 | |) 5-9 y | | | 0+ yes | | Don't | |
| ONo | O Yes → | if ves. | | many it does | per day? | <u> </u> | Less the | n ()4 | 00 m | | 901 | 10 | 01 | 301 m | |) Don't | |
| - | | | | | | 0.45 | 400 mg | | 00 mg | | 1300 | | | more | | know | |
| | t you take | on | = | Folic ac | | Cod liver Oil | 5 |) lodine) Copper | , C | Beta- Caro | tene | | Other (please specify): | | | | |
| a regular t | basis? Plea IS: | | Ö | B-Come | olex O | Omege-3 | 5 |) Brewer's | |) Megr | nesium | | | | | • | |
| | | | | Vitarium | 8 | Fetty-eck | 35 | Yeast | | | | | | | | | _ |
| 3. For each fo | ood listed. | fill in the | circl | • indic: | ntina | | | | A. | VEDA | GE U | CE I A | ST V | EAR | | | <u></u> |
| how often specified d | on averag | e you ha | ve us | ed the | amount | | | Never. | 1-3 | 1 | 24 | 54 | 1 | 2-3 | 44 | 0 + | 0000 |
| | | يهيها المها | · | | | | | # 1000 Them error | 2 20 | per Week | - | per week | <u>.</u> | per | 11 | = | Q- |
| | | | | | JRY FOODS | | | | | | ~ | | | | i C | 0 | 8 |
| | | | | (8 cz. (| ik (8 az. gies: riess) | 5) | | +8 | 8 | © | 8 | 8 | 0 | 8 | 8 | 8 | 8- |
| | | | | | whipped (Tb | | | 18 | ŏ | Ö | ŏ | ŏ | ŏ | ŏ | ŏ | Ö | - |
| В- | 234 | | Creen | | | | | 10 | 0 | 0 | 0 | Ō | 0 | 0 | 0 | 0 | D - |
| | | | | | hitener (tep.) | | | 10 | Q | . 🔘 | Q | Q | 0 | Q. | Q | N | 0 |
| | | | | | (A) crb) | | | -18 | 8 | 0 | 8 | 2 | 0 | 8 | 8 | 8 | Ď- |
| | | | urt (1 c | y arb) | | | <u> </u> | -18 - | X | 8 | 8 | | 0 | 8 | 8 | Hŏl | ⊕ = |
| | | | | | cheese (1/2 cu | D) | | lŏ | ŏ | Ö | ŏ | ŏ | 0 | Ŏ | Ö | Ō | TO- |
| | | | | 1. 0 | | | | 10 | Ō | 0 | Ō | 0 | 0 | 0 | 0 | 0 | Ö• |
| | | | min er (| es, e.g. d is pert (serving) | American, chi of a dish (1 si | eddar, et ice | - | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | KO |
| | | Man | gerne (| | ded to food (| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Ö- |
| Please turn | | Butt | er (pet | | to food or b | reed; | | 10 | 0 | 0 | 0 | C | 0 | C | 0 | 0 | 6 |
| to page 2 | | | | | | | | | | | <u></u> | | | | | | |

Page 2 3. (Continued) Please fill in your average use. 2.3 4.5 6-1-3 during the past year, of each specified food. 001 900 than once day day day P FRUITS ♨ Raisins (1 oz. or small pack) or grapes <u>(a)</u> ⑽ Prunes (':: cup) **∞ ©** Please try to Bananas (1) average your **(**0) ➌ Cantaloupe (1/2 melon) seasonal use 0 ☻ Watermeion (1 slice) of foods over 0 the entire year. ℗ Fresh apples or pears (1) For example, if 0 0 Apple juice or cider (small glass) a food such as 0 cantaloupe is Oranges (1) eaten 4 times a ℗ 0 Orange juice (small glass) week during the **⊚ (** approximate 3 Grapefruit (1/2) months that it is 0 0 \mathbf{C} Grapefruit juice (small glass) in season, then 0 ➌ Other fruit juices (small glass) the average use **⊚** 0 Strawberries, fresh, frozen or canned (1/2 cup) would be once per week. 囫 ⊚ Blueberries, fresh, frozen or canned (1/2 cup) Peaches, apricots or plums (1 fresh. or 1/2 cup canned) 1-3 per day per per \odot VEGETABLES **(**0) Tomatoes (1) 0 0 Tornato juce (small glass) **(** Tornato sauce (1/2 cup) e.g. spaghetti sauce 8 Red chili sauce (1 Tbs) 0 Tofu or soybeans (3-4 oz.) **®** ⊚ String beans (1/2 cup) 0 Broccoli (1/2 CUD) 0 Cabbage or cole slaw (1/2 cup) 0 Cauliflower (1/2 cup) ⊚ Brussels sprouts (1/2 cup) 0 0 Carrots, raw (1/2 carrot or 2-4 sticks) **(** Carrots, cooked (1/2 cup) 0 Corn (1 ear or 1/2 cup frozen or canned) 0 റ Peas, or ima beans (1/2 cup fresh, frozen, canned) \bigcirc 0 0 Mixed vegetables (1/2 cup) 0 0 Beans or lentils, baked or dried (1/2 cup) 0 -----➌ Yellow (winter) squash (1/2 cup) ℗ Eggplant, zucchini, or other summer squash (1/2 cup) 0 Yams or sweet potatoes (1/2 cup) **(** Spinach, cooked (1/2 cup) 0 Soinech, raw as in salad 0 Kale, mustard or chard greens (1/2 cup) ℗ loaberg or head lettuce (serving) - -**(**0) ത Romaine or leaf lettuce (serving) **(**0) Celery (4° stick) **(** Beets (1/2 cup) <u></u> Alfalfa sprouts (1/2 cup) Gartic, fresh or powdered (1 clove or shake) B - 235per per day per ĕ EGGS. MEAT, ETC. 0 Eggs (1) <u></u> Chicken or turkey, with skin (4-6 oz.) <u>8</u> 0 Chicken or surkey, without skin (4-6 oz.)

0

Please go to page 3 Bacon (2 stces)

Hot dogs (1)

Page 3 NCS Trans-Optic EP01-26459: 10987 A9101 3. (Continued) Please fill in your average use. Never 2-4 2-3 during the past year, of each specified food. or less hen ont per day per per day dav mo. day Ē MEATS (CONTINUED) **⊚** 0 Processed meats, e.g. sausage, salami, bologna, etc. (piece or slice) € **(**0) Liver (3-4 oz.) (8) 0 \cap \Box Hamburger (1 patty) **®** 0 Beef, pork, or lamb as a sandwich or mixed dish, e.g. stew, casserole, lasagne, etc. <u></u> Beef, pork, or lamb as a main dish, e.g. steek, ➌ O roast, ham, etc. (4-6 oz.) <u>(0)</u> Canned tuna fish (3-4 oz.) Dark meat fish, e.g. mackerel, salmon, sardines, bluefish, swordfish (3-5 oz.) 0 Other fish (3-5 oz.) **∞** 0 <u>(a)</u> Shrimp, lobster, scallops as a main dish Never. 1-3 2-3 6+ per per per hen one معة day day day BREADS, CEREALS, STARCHES P Cold breakfast cereal (1 cup) **⊗** 0 O Cooked oatmeal (1 cup) 0 Other cooked breakfast cereal (1 cup) · 12.5 0 8 White bread (slice), including pita bread 0 0 Dark bread (slice) (A) 0 English muffins, bagels, or rolls (1) **©** Muffins or biscuits (1) 0 **6** Brown nce (1 cup) 0 White rice (1 cup) 0 Pasta, e.g. spaghetti, noodles, etc. (1 cup) Other grains, e.g. bulgar, kasha, couscous, etc. (1 cup) los Pancakes or waffles (serving) (6) French fried potatoes (4 oz.) **(0**) Potatoes, baked, boiled (1) or mashed (1 cup) 0 0 0 \Box Potato chips or com chips (small bag or 1 oz.) Crackers, Triskets, Wheat Thins (1) **©** Pizza (2 sices) 1-3 2-4 2-3 **b** po (2) BEVERAGES CARBONATED Low calone cola, e.g. Tab with caffaine 0 BEVERAGES Low Calorie 0 Low calorie caffeine-free cols, e.g. Pepsi Free O 0 (sugar-free) Other low calorie carbonated beverage, e.g. 0 types Consider the Freeca, Diet 7-Up, diet ginger ale serving size O Coke, Pepsi, or other cola with sugar 0 as 1 glass, Caffeine Free Coke, Pepal, or other cola O 0 bottle or can Reguler types for these with sugar (not sugercarbonated O ℗ C O ➌ beverages. Other carbonated beverage with sugar. e.g. 7-Up, ginger ale 9 O Hawaiian Punch, lemonada, or other non-O O 0 OTHER carbonated fruit drinks (1 glass, bottle, carr) **BEVERAGES** 0 Decaffeinated coffee (1 cup) Coffee (1 cup) 0 <u>(a)</u> Tea (1 cup), not herbal teas 0 Beer (1 glass, bottle, can) 0 ❷ Red wine (4 oz. glass) B-236 ℗ White wine (4 oz. class) **(** Liquor, e.g. whiskey, gin, etc. (1 drink or shot) Please turn (P)

to page 4

| | ID: | | 0000 0000 | 000 | 900 900 | 200 | |) @ (| | | 70 0 | | 0 0 0 | <u> </u> | 90 | 000 000 |
|----|----------|--|----------------|---------------|------------|-------------------|---------------|----------------|---------------|-----------------------|-----------------|---------------|-------------|---------------|------------------------|------------------------|
| _[| | ontinued) Please fill in your | 0000 | <u>oo</u> o | <u>300</u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | | | |
| | ave | erage use during the past year, each specified food. | | ever, | 1-3 | 1 | 2-4 | 5-6 | 1 | 2.3 | 4-5 | 6+ | | | | <u> </u> |
| | 01 | SWEETS, BAKED GOODS, MISCELLA | the | month | per mo. | per week | per week | per week | per day | day | day | day | 0 | ນ ຈຸດ | | 0 00 0 00 |
| | | Chocolate (bars or pieces) e.g. Hershey's. N | | 0 | 0 | ⊚ | 0 | 0 | 0 | 0 | 0 | 0 | H | <u>୭</u> ଡ | 00 | 000 |
| | | Candy bars, e.g. Snickers, Milky Way, Rees | | ŏ | ŏ | 8 | Ŏ | ŏ | 8 | ŏ | ð | ŏ | Ď | 30 | 00 | 000 |
| | | Candy without chocolate (1 oz.) | | Ŏ | Ŏ | © | Ŏ | Ŏ | 0 | Ŏ | Ŏ | Ŏ. | TO | 90 90 | $\mathbf{O}\mathbf{O}$ | <u>୭</u> ୭୭ |
| | | Cookies, home baked (1) | | Ō | 0 | 8 | 0 | 0 | 0 | O | Ō | Ō | | ÕÕ | (i) | ତାତ ତ |
| _ | | Cookies, ready made (1) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | ව ව | 0 0 | ා ල ල |
| | | Brownies (1) | | 0 | 0 | ® | 0 | 0 | 0 | Q | 0 | 0 | | 3 ② | 0 2 (| ❷ ® |
| | | Doughnuts (1) | | Q | Q | <u>Ø</u> | Q | Ó | 0 | Q | Q | Q | | | | <u> </u> |
| | | Cake, home baked (slice) | | <u>Q</u> . | 8 | 8 | $\frac{0}{0}$ | 8 | <u>@</u> | Q | 0 | Q | | | | |
| _ | | Cake, ready made (slice) | | 용. | 8 | 8 | 8 | 8 | 0 | 8 | 8 | 8 | | | | 0 0 0 3 0 0 |
| _ | | Sweet roll, coffee cake or other pastry, home baked (serving) | | | | | | | | | | | <u> </u> | 33 | ③ @(| 3 33 |
| | | Sweet roll, coffee cake or other pastry, ready made (serving) | | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | 9 | © @(| 0 00 9 00 |
| | | Pie, homemade (slice) | | Q | Q | 88 | Q | Q | 0 | Q | Q | Q | | 0 (| ⊚ (⊝(| $\Theta \Theta \Theta$ |
| | | Pie, ready made (slice) | | Q | Q | | Q | <u>Q</u> | <u></u> | Q | Q | Q | | | | <u>ତ୍ର</u> ାତ୍ର ତ |
| | | Jams, jellies, preserves, syrup, or honey (1 | Tbs) | <u>Q</u> _ | 121 | 8 | 2 | 2 | 0 | <u>Q</u> | Q | Q | LQ' | O | | |
| = | | Peanut butter (Tbs) Popcom (1 cup) | | <u>Q</u> | 12 | 8 | X | 8 | 0 | 8 | Q | 8 | | | | |
| | | Nuts (small packet or 1 oz.) | | 8 | X | 8 | \times | 8 | 0 | 8 | 8 | 8 | | | | 900 900 |
| _ | • | Bran, added to food (1 Tbs) | | \mathcal{S} | 8 | Ö | \mathcal{S} | $\frac{8}{6}$ | Ö | $\frac{\circ}{\circ}$ | 8 | 8 | | | | 300 |
| | | Wheat germ (1 Tbs) | | ਨ | ŏ | Ö | ŏ | ਨ | 8 | ਨ | ŏ | ŏ | | | | 300 |
| 4 | • | Chowder or cream soup (1 cup) | ð | Ŏ | 0 | 0 | Ō | 0 | Ö | Ŏ | Ŏ | | | | 300 | |
| | | Oil and vinegar dressing, e.g. Italian (1 Tbs) | Ŏ | Ō | Θ | Ō. | Ŏ | 0 | Ŏ | Ō | Ŏ | | ĎÕ. | ⊙ (⊚(| 300 | |
| | | Mayonnaise or other creamy salad dressing (1 Tbs) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | OK | ⋑ ⊚ | ○ ⊝ (| 900 900 |
| | Ì | Mustard, dry or prepared (1 tap) | | 0 | 0 | ⊕ | 0 | O | 0 | 0 | 0 | 0 | | | | |
| | | Pepper (1 shake) | | Ō | 0 | @ | Ō | Ō | 0 | Ō | Ō | Ō | O | 9 Ø | 000 | 900 |
| | - [| Salt (1 shake) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 90 | <u> </u> | <u>୭</u> ୭୭ |
| | 4. How | v much of the visible fat on your meats ove before eating? | do you | T | O. Hov | v man | | | | | | | |) () () () | 00(20(| 0 0 0 0 |
| | O.Re | emove all visible fat Remove small | li part of fat | L | bev | erages | or foo | | | | '_ _ | | 1882 | 30 | 300 | 999 |
| | ORe | emove majority Remove none | | - F | 1. Wh | at typ | | | | | | | K | 9 (B) | \odot | |
| = | | O (Don't eat m | | | oil d | uoy ot | | 1. | • | | | | | D (O | 3 3 (| 0 |
| | | st kind of fat do you usually use for frys sautéing? (Exclude "Pam"-type spray) | ng | L | 2 Wh | aliy us | | - | | Seeci | y type | and br | | | | 9 00 900 |
| | ○ Re | eal butter O Vegetable oil | () Lard | | cold | l break sal do | tast | .] | | | | | | | | |
| | Ŏм | ergarine O Vegetable shortenin | _ | | | ally us | | | | • | h. a . | | | | | 900 |
| | . Wha | nt kind of fat do you usually use for bak | ing? | 7 | 3. An | | | | | ortani | | and br | | usua | illy | O |
| - | | al butter | ○ Lard | | eat | at le | ast o | TCB D | M We | <u>ek</u> ? | | | | | | 0 |
| | Ow | ergarine O Vegetable shortenin | 8 | | | ude fo | | | | | | | | | | 0 |
| | 7. Wha | it form of margarine do you usually use? | | - | hor | seradi: onut. | ih, par | snips, | rhuba | rb, rac | lishes, | fava t | eans, | Carro | t juice | . @ |
| | _ | | | | 300 | | | , 11 12 | - | | ., | . | | , | · .A | 9 |
| | ONo | one O Stick O Tub O Spread O Low-calorie stick O Low-c | | | | not in n liste | | | | | | st som | ething | that | has | <u> </u> |
| | | often do you eat food that is fried at h | ome? | ┰ | | Other | | | | | - <i>,</i> | | leval | <u> </u> | See- | vings |
| 1 | - | lude the use of "Pam"-type spray) | | | | use at | | | | | | | ring si | 20 | | week |
| 1 | 00 | • | r week | 10 | a) | | | | | | | | | | | |
| | 01: | 3 times per week | ce a week | ۲ | | | | | | | | | | | | |
| 7 | . How | often do you eat fried food away from | home? | | b) | | | | | | | | | | | |
| | (e.g. | french fries, fried chicken, fried fish) | | Γ. | | | | | | | | | | Ī | | |
| | O Da | uily 4-6 times per | r sameL | 19 | c) | | B-2 | 37 | . | | ! | | | <u> </u> | | |
| | = | 3 times per week Less than on | | 10 | d) | | | | | | | | | | | |
| _ | <u> </u> | CESS UNIT OF | CG G MACK | | -, | | | | | | : | | | | | |

Project No: 4563

Air Force Health Study Third Followup Examinations 1992-1993

Interval Supplementary Recording Book

| CASE | ID | # | | I | | | | | |
|------|----|---|---------|-------|------|------|-----|--|--|
| | | | | Proie | ct N | o: 4 | 563 | | |

Air Force Health Study Third Followup Examinations 1992-1993

Interval Supplementary Recording Book

OCCUPATIONAL EXPOSURE TO HEAVY METALS AND VIBRATING POWER TOOLS

THIS SECTION CONTAINS QUESTIONS IS1 - IS17

| IS1. | Now I am going to ask you a few questions about equipment or metals you may have been regularly exposed to at work in <u>any</u> of the jobs you have <u>ever</u> had, not just the recent one(s) that you just told me about. |
|-------|--|
| | First, in <u>any</u> job you have held, have you ever worked for 30 days or more with vibrating power equipment or tools? |
| | YES |
| IS2. | In what year did you start working with vibrating power equipment or tools? |
| | RECORD YEAR: 1 9 |
| IS3. | In what year did you <u>last</u> work with vibrating power equipment or tools? |
| | RECORD YEAR: 1 9 |
| I\$4. | For how many months in all did you work with vibrating power equipment or tools? |
| | RECORD NUMBER OF MONTHS: |
| IS5. | In any job you have held, have you ever worked for 30 days or more with lead? |
| | YES |
| S6. | In what year did you start working with lead? |
| | RECORD YEAR: 1 9 |
| S7. | In what year did you <u>last</u> work with lead? |
| | RECORD YEAR: 1 9 |

| IS8. | For how many months in all did you work with lead? |
|-------|--|
| | RECORD NUMBER OF MONTHS: _ _ |
| IS9. | In <u>any</u> job you have held, have you ever worked for 30 days or more with mercury-either metallic mercury or mercury vapor? |
| | YES |
| IS10. | In what year did you start working with mercury? |
| | RECORD YEAR: 1 9 |
| IS11. | In what year did you <u>last</u> work with mercury? |
| | RECORD YEAR: 1 9 |
| IS12. | For how many months in all did you work with mercury? |
| | RECORD NUMBER OF MONTHS: |
| IS13. | In <u>any</u> job you have held, have you ever worked for 30 days or more with any other heavy metal, such as chromium, nickel, or copper? |
| | YES |
| | 140 |
| IS14. | What (other) type(s) of heavy metals did you work with? CODE ALL THAT APPLY: |
| | CHROMIUM 01 NICKEL 02 COOPER 03 CADMIUM 04 MANGANESE 05 ARSENIC 06 SELENIUM 07 MOLYBDENUM 08 OTHER (SPECIFY) |

| IS15. | In what year did you start working with one of these (other) heavy metals? |
|-------|---|
| | RECORD YEAR: 1 9 |
| IS16. | In what year did you <u>last</u> work with one of these (other) heavy metals? RECORD YEAR: 1 9 |
| IS17. | For how many months in all did you work with one or more of these (other) heavy metals? RECORD NUMBER OF MONTHS: MONTHS |

IF ANY CIVILIAN JOBS, RETURN TO SECTION C, Q.21 ON PAGE C-13 IN INTERVAL Q. IF NO CIVILIAN JOBS, RETURN TO SECTION D, Q.1 ON PAGE D-1 IN INTERVAL Q.

FAMILY HEALTH HISTORY

THIS SECTION CONTAINS QUESTIONS IS18 - IS24

| IS18. The next few questions are about (other) possible medical conditions of y is, your biological mother, father, sisters, and brothers. First, has anyone in your immediate family ever had diabetes or sugar stepparents or adopted, step or half brothers and sisters. YES NO | diabetes? Do not count |
|---|-------------------------|
| Stepparents or adopted, step or half brothers and sisters. YES | |
| NO (SKIP TO Q. IS21) | 2 |
| | |
| IS19. Which members of your immediate family have or had diabetes? CODE A | LL THAT APPLY. |
| MOTHER | |
| IS20. Did any of these family members first have diabetes when they were your | iger than age 30? |
| YES | |
| IS21. Has anyone in your immediate family ever had heart trouble or heart stepparents or adopted, step or half brothers and sisters.) | disease? (Do not count |
| YES | 1 |
| (SKIP BACK TO SECTION FOR PAGE F-15 IN INTERVA | 2 |
| DON'T KNOW | TO) |
| S22. Which members of your immediate family have or had heart trouble or he THAT APPLY. | art disease? CIRCLE ALL |
| MOTHER | |

| IS23. | What type or t | pes of heart trouble or heart disease did (he/she/they) have? CODE ALL THAT APPLY. |
|-------|-----------------|--|
| | | HYPERTENSION OR HIGH BLOOD PRESSURE |
| IS24. | Did any of thes | e family members first have heart trouble or heart disease when they were younger than |
| | | YES |
| | | TION F. Q.28 ON PAGE F-15 IN THE INTERVAL QUESTIONNAIRE |

DIABETES

| | THIS SECTION CONTAINS QUESTIONS IS25 - IS49 |
|-------|--|
| IS25. | Have you <u>ever</u> been told by a doctor or other health professional, such as a nurse or physician assistant, that you had diabetes or sugar diabetes? (Do not include pre-, potential, or borderlindiabetes.) |
| | YES |
| | NO |
| IS26. | How old were you when the (doctor/health professional) first told you that you had diabetes? |
| | YEARS OLD |
| IS27. | What is the full name and address of the doctor who <u>first</u> made the diagnosis, or the medical facilit where the diagnosis was first made? REVIEW MEDICAL AUTHORIZATION FORMS. COMPLETE NEW MEDICAL AUTHORIZATION FORM, IF NECESSARY. |
| | LAST NAME |
| | FIRST NAME |
| | OR |
| | FACILITY NAME |
| | STREET ADDRESS |
| | CITY STATE |
| S28. | lave you ever been told that you have acidosis or ketoacidosis due to a high blood sugar level? |
| | YES |

| IS29. | IF PARTICIPANT MENTIONED INSULIN AS ONE OF THE MEDICATIONS THAT HE IS CURRENTLY TAKING FOR HIS DIABETES IN RESPONSE TO QUESTION 36E IN SECTION G OF THE INTERVA QUESTIONNAIRE, VERIFY THIS WITH PARTICIPANT, THEN CIRCLE FOR THIS QUESTION. |
|----------------|--|
| | OTHERWISE ASK: Have you ever taken insulin injections? |
| | YES |
| I S 30. | Have you been taking insulin injections for most of the past 12 months? |
| | YES |
| IS31. | IF PARTICIPANT MENTIONED INSULIN AS ONE OF THE MEDICATIONS THAT HE IS CURRENTLY TAKING FOR HIS DIABETES IN RESPONSE TO QUESTION 1E IN SECTION G OF THE INTERVA QUESTIONNAIRE, VERIFY THIS WITH PARTICIPANT, THEN CIRCLE "YES" FOR THIS QUESTION. |
| | OTHERWISE ASK: Are you now taking insulin injections? |
| | YES 1 NO 2 |
| IS32. | How many years (have you been taking/did you take) insulin injections? |
| | YEARS [LESS THAN A YEAR = 00] |
| S33. | Have you ever had an insulin reaction? |
| | YES |
| S34. | About how many insulin reactions have you had during the past 12 months? |
| | ENTER NUMBER: [NONE = 00] |
| | |

| I S3 5. | During the past 12 months, about how often, either on your own or with the help of a family member or friend, did you check your blood for glucose or sugar? |
|----------------|--|
| | NEVER 0 |
| | TIMES PER DAY _ |
| | OR |
| | TIMES PER WEEK _ |
| | OR |
| | TIMES PER MONTH |
| | OR |
| | TIMES PER YEAR _ |
| S36. | In the past 12 months, about how many times has a health professional checked your blood for glucose or sugar? |
| | TIMES NONE = 00 |
| \$37. | IF PARTICIPANT HAS NEVER CHECKED HIS OWN BLOOD GLUCOSE OR SUGAR LEVEL OR HAD IT CHECK BY A PROFESSIONAL (HIS ANSWER TO QUESTION IS35 WAS "NEVER" <u>AND</u> HIS ANSWER TO QUESTION IS36 WAS "NONE") CIRCLE "0" (NO TEST IN PAST 12 MONTHS) FOR THIS QUESTION. |
| | OTHERWISE ASK: Based on <u>all</u> your blood sugar tests during the past 12 months, how often would you say your blood sugar level has been too high? Would you say always, most of the time, some of the time, rarely, or never? |
| | NO TEST IN PAST 12 MONTHS 0 ALWAYS |

| IS38. | IF PARTICIPANT MENTIONED DIABETES PILLS (OR ORAL HYPOGLYCEMICS) AS MEDICATIONS THAT HE IS CURRENTLY TAKING FOR HIS DIABETES IN RESPONSE TO QUESTION 36E IN SECTION G OF THE INTERVAL QUESTIONNAIRE, VERIFY THIS WITH PARTICIPANT, THEN CIRCLE "YES" FOR THIS QUESTION. |
|-------|--|
| | OTHERWISE ASK: Have you ever taken diabetes pills? |
| | YES |
| IS39. | Have you been taking diabetes pills most of the past 12 months? |
| | YES 1 NO 2 |
| IS40. | IF PARTICIPANT MENTIONED DIABETES PILLS (OR ORAL HYPOGLYCEMICS) AS MEDICATIONS THAT HE IS CURRENTLY TAKING FOR HIS DIABETES IN RESPONSE TO QUESTION 1E IN SECTION G OF THE INTERVAL QUESTIONNAIRE, VERIFY THIS WITH PARTICIPANT, THEN CIRCLE "YES" FOR THIS QUESTION. |
| | OTHERWISE ASK: Are you now taking diabetes pills? |
| | YES |
| IS41. | IF PARTICIPANT GAVE YOU THE NAME OF THE MEDICINE IN QUESTION 1E IN SECTION G OF THE INTERVAL QUESTIONNAIRE, RECORD IT AGAIN BELOW. |
| | OTHERWISE ASK: What is the name of the medicine that you are taking? |
| | SPECIFY: |
| IS42. | How many years (have you been taking/did you take) diabetes pills? |
| | YEARS LESS THAN A YEAR = 00 |
| IS43. | Has a doctor, nurse, or other health professional ever given you a diet or instructions on what foods to eat for your diabetes? |
| | YES |
| IS44. | Do you now follow the diet or instructions for your diabetes? |
| | YES |

| IS45. | How many years (have you been/were you) following a diet or instructions for your diabetes? |
|-------|--|
| | YEARS LESS THAN A YEAR = 00 |
| IS46. | Do you carry or wear anything that identifies you as having diabetes? |
| | YES |
| IS47. | IF PARTICIPANT WAS DIAGNOSED WITH DIABETES SINCE HIS LAST INTERVIEW, AND GAVE YOU THE DATE WHEN HE LAST SAW A DOCTOR ABOUT HIS DIABETES IN QUESTION 36F IN SECTION G OF THE INTERVAL QUESTIONNAIRE, CIRCLE THE CATEGORY BELOW THAT CONTAINS THAT DATE. |
| | OTHERWISE ASK: When did you last see or talk to a doctor or other health professional about your diabetes? |
| | DURING PAST 2 WEEKS 1 |
| | OVER 2 WEEKS TO 6 MONTHS 2 |
| | OVER 6 MONTHS TO 12 MONTHS |
| | OVER 12 MONTHS TO 2 YEARS |
| | OVER 2 YEARS TO 5 YEARS ISKIP BACK TO SECTION G. Q.37 ON PAGE G-14 IN INTERVAL Q) 5 |
| | OVER 5 YEARS AGO 6 |
| S48. | Was the doctor or other health professional pleased with the degree of control you have over the level of sugar or glucose in your blood? |
| | YES |
| S49. | About how many times a year do you see a doctor or other health professional about your diabetes? |
| | LESS THAN ONCE A YEAR |
| SKIP | BACK TO SECTION G. 0.37 ON PAGE G-14 IN THE INTERVAL QUESTIONNAIRE. |

HEPATITIS B

THIS SECTION CONTAINS QUESTION ISSO

IS50. Vaccination against hepatitis B has been recommended for health care workers and others at risk for hepatitis B infection since a plasma-derived vaccine first became available in June 1982. The hepatitis B vaccine is different from the hepatitis A vaccine, because the hepatitis B is administered in the arm. Since June of 1982, have <u>you</u> ever been vaccinated against the hepatitis B virus (HBV)?

| YES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | • |
|------|--|------|--|--|--|--|---|--|--|---|--|------|------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|------|---|
| NO . | | | | | | | _ | | | _ | | | | | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | | | • |

SKIP BACK TO SECTION G. 0.51 ON PAGE G-30 IN THE INTERVAL QUESTIONNAIRE

PAIN IN LEGS

THIS SECTION CONTAINS QUESTIONS ISS1 - IS61

| IS51. | Do you get a pain in either or both of your legs while walking? | |
|-------|---|-----|
| | YES (SKIP TO Q. IS61) | 1 2 |
| IS52. | Does this pain ever begin when you are standing still or sitting? | |
| | (SKIP BACK TO SECTION G. 0.59 ON PAGE G-54 IN INTERVAL 0) YES NO | 1 2 |
| IS53. | Do you get this pain in either or both of your calf muscles? | |
| | YES | 1 |
| | NO | 2 |
| IS54. | Do you get it when you walk uphill or hurry? | |
| | YES | 1 |
| | ON PAGE G-54 IN INTERVAL (I) | 2 |
| | NEVER HURRIES OR WALKS UPHILL | 0 |
| IS55. | Do you get it when you walk at an ordinary pace on level ground? | |
| | YES | |
| IS56. | Does the pain ever disappear while you are still walking? | |
| | YES | |

| IS57. | What do you usually do if you get it when you are walking? |
|----------------|---|
| | STOP |
| | SAME PACE 3 |
| IS58. | What happens to it if you stand still or rest; does the pain usually continue for more than 10 minutes, or does it usually disappear in 10 minutes or less? |
| | USUALLY CONTINUES MORE THAN 10 MINUTES |
| I S 59. | When you get this pain, have you <u>ever</u> noticed a change in the color of your legs when you get this pain? |
| | (SKIP BACK TO SECTION G, Q.59 ON PAGE G-54 IN INTERVAL Q) |
| | NO |
| IS60. | Would you say that you notice this change in color always, most of the time, rarely or never? |
| | ALWAYS |
| SKIP | BACK TO SECTION G, 0.59 ON PAGE G-54 IN THE INTERVAL QUESTIONNAIRE |
| IS61. | Did you ever get a pain in your legs while walking that went away when you rested, but no longer get it because you took medicine or had surgery for this condition? [NOTE TO INTERVIEWER: THE MEDICINE THAT THE PARTICIPANT MAY HAVE TAKEN ARE VASODILATING DRUGS. TYPES OF SURGERY WOULD INCLUDE REVASCULARIZATION, ENDARTECTOMY OR ANGIOPLASTY ON THE PARTICIPANT'S LEGS.] |
| | YES 1 NO 2 |
| SKIP | BACK TO SECTION G. 0.59 ON PAGE G-54 IN THE INTERVAL QUESTIONNAIRE |

PHYSICAL EXERCISE

THIS SECTION CONTAINS QUESTIONS IS62 - IS77

| IS62. | These next few questions are about physical exercise. INTERVIEWER: FROM OBSERVATION OR PREVIOUS INFORMATION, IS R PHYSICALLY HANDICAPPED? |
|-------|--|
| | YES |
| IS63. | HAND R CALENDAR. In the past two weeks, beginning Monday (DATE) and ending this past Sunday (DATE), have you done any exercises, sports, or physically active hobbies? |
| ٠ | YES |
| S64. | What were they? RECORD IN QUESTION IS65. |
| | PROBE: Anything else? |
| | READ ONLY CATEGORIES IN Q. IS65 THAT PARTICIPANT COULD PERFORM WITH HIS HANDICAP. |

11:09 am

Field Version 1.1

| | g Book |
|-----------------------------|---------------------------------------|
| Study | Interval Supplementary Recording Book |
| 1991 Air Force Health Study | mentary |
| Vir Force | Supple |
| 1991 | Interval |
| | |

| IS65. HAND R CALENDAR. In the past two weeks (outlined on that calendar), beginning Monday (DATE) and ending this past Sunday (DATE), have you done any of the following exercises, sports, or physically active hobbies | the past two alendar),) and ending this e you done any of ports, or | IS66. How many times in the past 2 weeks did you [go/do] (ACTIVITY)? | IS67. On the average, how many minutes did you actually spend doing (ACTIVITY) each time? | What usually happened to your heart rate or breathing when you [did/went] (ACTIVITY)? Did you have a small, moderate, or large increase or no increase at all in your heartbreathing? (1 = SMALL, 2 = MODERATE, 3 = LARGE, 0 = NONE, 8 = DON'T KNOW) |
|---|--|---|---|---|
| A. Walking for exercise? | 1 2 | - - | | 1 2 3 0 8 |
| B. Gardening or yard work? | 1 2 | [| | 1 2 3 0 8 |
| C. Stretching exercises? | 1 2 | | | |
| D. Weightlifting or other exercises to increase muscle strength? | 1 2 | | . | 1 2 3 0 8 |
| E. Jogging or running? | 1 2 | - - - | | 1 2 3 0 8 |
| F. Hiking? | 1 2 | | | 1 2 3 0 8 |

1991 Air Force Health Study Interval Supplementary Recording Book

| 7831 | two How many times in the past 2 weeks did you [go/do] (ACTIVITY)? | (1=SMALL, 2=MODERATE, 3=LARGE, 0=NONE, 8=DON'T KNOW) | 1 2 1 2 3 0 8 | ieral 1 2 1 2 3 0 8 | 1 2 | 1 2 | 1 2 | 1 2 1 2 3 0 8 | |
|-------|--|--|---------------------------------|--------------------------------------|---|------------------------|----------------------------------|------------------------|--|
| 1865. | HAND R CALENDAR. In the past two weeks (outlined on that calendar), beginning Monday (DATE) and ending this past Sunday (DATE), have you done any of the following exercises, sports, or physically active hobbies | | G. Aerobics or aerobic dancing? | H. Calisthenics or general exercise? | I. Riding a bicycle or exercise bike? 1 2 | J. Stair climbing? 1 2 | K. Swimming for 1 2 exercise? | L. Playing tennis? 1 2 | |

May 15, 1992

1991 Air Force Health Study Interval Supplementary Recording Book

| IS65. HAND R CALENDAR. In the past two weeks (outlined on that calendar), beginning Monday (DATE) and ending this past Sunday (DATE), have you done any of the following exercises, sports, or physically active hobbies | past tw eginning Sunday lowing e obbies . | o weeks Monday (DATE), sxercises, | IS66. How many times in the past 2 weeks did you [go/do] (ACTIVITY)? | IS67. On the average, how many minutes did you actually spend doing (ACTIVITY) each time? | What usually happened to your heart rate or breathing when you [did/went] (ACTIVITY)? Did you have a small, moderate, or large increase or no increase at all in your heartbreathing? |
|--|---|--|--|--|---|
| | Yes | No | | | (1=SMALL, 2=MODERATE, 3=LARGE, 0=NONE, 8=DON'T KNOW) |
| N. Playing golf? | 1 | 2 | | | |
| O. Playing baseball or softball? | - | 2 | | | 1 2 3 0 8 |
| P. Playing handball, racquetball, or squash? | - | 2 | | | 1 2 3 0 8 |
| O. Skiing? | | 2 (SKIP TO R) | | | |
| (1) Downhill? | - | 4 | | | |
| (2) Cross-country? R. Water skiing? | | 7 7 | | | 1 2 3 0 8 |
| .0 | | | 1 1 1 | | |

May 15, 1992

11:09 am

B-257

11:09 am

1991 Air Force Health Study Interval Supplementary Recording Book

| IS68. On the average, how many minutes did your heart rate or breathing you actually spend doing (ACTIVITY) doing (ACTIVITY) each time? in your heartbreathing? (1 = SMALL, 2 = MODERATE, 3 = LARGE, 0 = NONE, 8 = DON'T KNOW) | 1 2 3 | - 2 | 1 2 3 |
|---|---|--|--|
| IS66. How many times in the past 2 weeks did you [go/do] (ACTIVITY)? | | <u>]</u> | _ _ _ |
| HAND R CALENDAR. In the past two weeks (outlined on that calendar), beginning Monday (DATE) and ending this past Sunday (DATE), have you done any of the following exercises, sports, or physically active hobbies | W. Have you done any 1 2 (SKIP (other) exercises, TO Q. sports, or physically active hobbies in the past 2 weeks? | (1) What were they? Anything else? IF LISTED ACTIVITY, MARK "YES" FOR THAT ACTIVITY. OTHERWISE, SPECIFY: | (2) Anything else? IF "YES", CIRCLE AND 1 2 SPECIFY: |

B-258

| IS69. | That is, would | he amount of physical exercise you I you say that you were physically ring a typical two week period? | | | |
|---------|-------------------------|--|--------------------|--------------------|------------------|
| | , | MORE ACTIVE LESS ACTIVE ABOUT AS ACTIVE | | | 2 |
| IS70. | Do you exercis | se or play sports regularly? | • | | |
| | | YES | | | |
| IS71. | | have you exercised or played specified to the control of the contr | ports regularly? | RECORD NUMB | ER AND CIRCLE |
| | | | WEEKS MONTHS | | 2 3 |
| IS72. | Would you say your age? | that you are physically more activ | ve, less active, c | or about as active | as other persons |
| | | MORE ACTIVE | . (SKIP TO Q. IS | S73B) | 2 |
| IS73A. | Is that a lot mo | re active or a little more active? | | | • |
| | | A LOT MORE | | | |
| IS73B.I | s that a lot less | active or a little less active? | | | |
| | | A LOT LESS | | | · |

| IS74. | IF R IS NOT CURRENTLY WORKING, SKIP TO Q. IS76. |
|-------|---|
| | OTHERWISE ASK: How much hard physical work is required on your (current) job? Would you say a great deal, a moderate amount, a little, or none? |
| | GREAT DEAL |
| IS75. | About how many hours per day do you perform hard physical work on your job? |
| | HOURS PER DAY _ |
| SKII | BACK TO SECTION J. O.1 ON PAGE J-1 IN THE INTERVAL QUESTIONNAIRE |
| IS76. | How much hard physical exercise is required in your main daily activity? Would you say a great deal, a moderate amount, a little, or none? |
| | GREAT DEAL |
| S77. | About how many hours per day do you perform hard physical work in your main daily activity? |
| | HOURS PER DAY _ |
| SKIF | BACK TO SECTION J. Q.1 ON PAGE J-1 IN THE INTERVAL QUESTIONNAIRE |

B-260

APPENDIX C

Physical Examination

1992 Examiner's Handbook and Physical Examination Forms

AIR FORCE HEALTH STUDY

EXAMINER'S HANDBOOK - 1992

6 January 1992

Table of Contents

- A. General Instructions
- B. Conduct of the Examination
 - 1. Overview
 - 2. Psychological Battery
 - 3. Electrocardiogram
 - 4. Visual Acuity Screening and Intraocular Pressure
 - 5. Pulmonary Function Testing
 - 6. Screening Audiometry
 - 7. Automated Blood Pressure Determination
 - 8. Stool Examination for Occult Blood
 - 9. Radiographic Examination
 - 10. Doppler Testing of Peripheral Pulses
 - 11. Assessment of Testicular Size
 - 12. Measurement of Height and Weight
 - 13. Vibrotactile Threshold Testing
 - 14. Laboratory Procedures

A. General Instructions

The Air Force Health Study is a multiyear effort to determine whether or not Air Force personnel who were engaged in the aerial spraying of herbicides in Vietnam have developed significant adverse health effects from that exposure. Detailed surveys of the world's literature have been used in designing the questionnaires, physical examination protocol, and laboratory procedure.

This phase of the study involves a follow-up cross-sectional assessment of the subject's health at the time of examination. It is important that examiners remain unaware of the subject's status as a RANCH HAND participant or as a comparison subject. The physician examiner is tasked to examine and objectively record his findings. The examining physician is not, and cannot be expected to arrive at any definitive diagnosis, since the full history and the laboratory results will not be available to him. Medical history, laboratory results and physical examination findings will be evaluated by an independent diagnostician employed by the contractor. This diagnostician will formulate diagnoses and differential diagnoses, if appropriate. Additional procedures to treat or evaluate emergency or urgent medical conditions will be directed only by this physician. In addition, he will present a detailed analysis and debriefing to the study subject and provide a copy of the analysis to the subject's personal physician, if authorized by the participant.

The physicians performing examinations for the study should be aware that the report of examination will become a permanent record. This report will be referred to not only in the near future as the cross-sectional data is analyzed, but also at the time of future follow-up phases of project. These examinations will define the health status of the subjects at a point in time and will establish the presence or absence of abnormal physical findings. After statistical review of the study groups, these findings may permit definition of a chronic effect due to exposure. An inaccurate examination may lead to fallacious study results in two ways: a presumed syndrome may be defined which does not in fact exist, or a syndrome which in fact exists may not be defined with enough validity to warrant further actions.

The examining physician is responsible for recording a complete and detailed report of the physical examination. In this role, the examining physician is tasked with collecting evidence of the presence or absence of physical signs of abnormality only. All items on the physical examination report form must be completed. It is imperative that the physician make such additional remarks as may be required to adequately describe existing physical and mental impairments. Since clinical endpoints have not been well defined following chronic exposure to Herbicide Orange, the examining physician and the diagnostician must not definitively ascribe

abnormalities to herbicide exposure during the course of the examination or during the patient's debriefing. If, during the examination, the physician discovers evidence of acute serious illness requiring immediate treatment, the normal emergency or urgent care procedure of the medical facility would apply.

The Air Force is not responsible for the cost of such care. If, during the examination, there is evidence of illness requiring nonemergency medical attention, the diagnostician should inform the subject and offer to forward, or have forwarded, pertinent information to the subject's physician. A clear record of any such advice and treatment should be recorded. The ultimate value of the study will lie in the collection of complete, accurate and, whenever possible, quantitative data permitting the most stringent and powerful statistical analysis. For this reason, the physical examination protocol requires exact measurements in many instances and the use of defined meanings of semiquantitative indicators in other places.

B. Conduct of the Examination

1. OVERVIEW:

Upon arrival at the examining facility, the subject should be briefed by the on-site monitor and a representative of the contractor on the appointments which have been arranged, their times, and locations. Consent forms covering all examination procedures shall be provided to each participant. The participant may still decline to participate in any individual portion of the examination, even if he previously signed a consent form.

The examination will be conducted in a manner identical to the process used in prior phases of the study and detailed in the subsequent sections of this handbook and in the Statement of Work.

- (a) Hemoccult screening of three specimens
- (b) Blood pressure determination using automated equipment
- (c) Drawing of approximately 350 cc of blood from 500 volunteers to be processed and tested for levels of 2,3,7,8 TCDD. Blood will be drawn and processed in accordance with CDC procedures.

Vietnam Combat questionnaires will only be given to those subjects who did not participate in the 1985 or 1987 examination:

2. PSYCHOLOGICAL BATTERY

a. General

This battery yields objective numerical data. The individual tests were chosen to insure an adequate analysis of one of the major alleged manifestations of herbicide toxicity. Each test either validates one of the other tests, or is considered to be a "definitive" test for analysis of a suspected psycho/neuropathic effect.

- b. <u>Specific Tests</u>: Symptom checklist R-90, Millon Multiaxial Clinical Inventory, instruments will be used.
- c. <u>Examination Results</u>: Forward all test materials as scored with annotations, interpretations, and impressions to the diagnostician for inclusion in the subject's examination file.
- d. The psychologist in charge will conduct a one-to-one test debriefing with each subject to estimate the test-by-test and overall accuracy and validity of the test results and to discuss the results of the tests with the participant. A form for this purpose should be developed and should be filled out completely before forwarding, with the subject's raw data, to the diagnostician. If applicable, input from the testing technician is encouraged.

3. ELECTROCARDIOGRAM

- a. A standard 12-lead scalar electrogram is required. If an arrhythmia is observed, a 1-minute rhythm strip is requested, in addition. This electrocardiogram will be accomplished after a minimum of 4-hour abstinence for smoking, food, and liquid intake.
- b. Mounting: Mount the tracing in the usual manner of the laboratory for the recorder used.
- c. <u>Disposition</u>: Forward the mounted tracing and rhythm strip, if obtained, to the diagnostician.
- d. <u>Interpretation</u>: The electrocardiograms will be interpreted by cardiologists at the examination center. Contractor proposals to use automated ECG interpretation will be reviewed by the AF.

4. VISUAL ACUITY SCREENING AND INTRAOCULAR PRESSURE

Screening for near and distant visual acuity will be conducted using equipment and procedures selected by the contractor and approved by the Air Force. Intraocular pressure to screen for the presence of glaucoma will be conducted using tonometry

equipment, which does not come in contact with the cornea, selected by the contractor and approved by the Air Force.

5. PULMONARY FUNCTION TESTING

Standard evaluation of pulmonary function will be conducted on each participant following at least 4 hours abstention from the use of tobacco products and will include as a minimum forced expiratory volume at 1 second, total vital capacity and the ratio of the two measurements.

6. SCREENING AUDIOMETRY

Screening of hearing will be conducted using equipment and procedures selected by the contractor and approved by the Air Force.

7. AUTOMATED BLOOD PRESSURE DETERMINATION

Pressure, and electronic device will be used to take all blood pressure, measurements. The device to be used will be selected by the contractor and approved by the Air Force.

8. STOOL EXAMINATION FOR OCCULT BLOOD

Three stool specimens from each participant will be tested for the presence of occult blood. Participants with positive tests will be advised and appropriate follow-up will be arranged.

9. RADIOGRAPHIC EXAMINATION

- a. Examination: A standard 14x17 in., standing, roentgenogram in the PA position.
- b. <u>Interpretation</u>: A board-certified radiologist at the examination center will interpret the roentgenogram and record the results and forward them to the diagnostician.

10. DOPPLER TESTING OF PERIPHERAL PULSES

A Doppler device shall be used to quantitatively measure the peripheral pulses. This procedure will be conducted after a minimum of 4 hour abstinence from smoking, food, and liquid intake.

11. ASSESSMENT OF TESTICULAR SIZE

Contractor will suggest method to assess testicular size.

12. MEASUREMENT OF HEIGHT AND WEIGHT

Determine height in meters and weight in kilograms on each participant. Determine the circumference of the waist at the navel and the circumference of the neck, all in centimeters.

13. VIBROTACTILE THRESHOLD TESTING

Measurement of the vibrotactile threshold in both great toes will be performed using the method of limits and techniques described in Section 4.2, reference 3.

14. LABORATORY PROCEDURES:

- a. <u>General Instructions</u>; First Day: The patient should report in the morning in a fasting state having had water only after midnight.
- b. <u>General Instructions</u>; <u>Second Day</u>: Serum hormone levels should be determined from specimens collected on the morning of the second day. Hormonal levels appear to oscillate rapidly in a random fashion. Distributions drift with time suggesting diurnal variations and some are affected by nonfasting state. Therefore, patients should be fasting prior to drawing blood for hormone analysis. Serum for dioxin determination will be drawn on 200 participants who consent to this procedure. Sufficient blood will be drawn to bring the total volume over the 2 days to 450 cc from these volunteers. Participants should also be informed that they should abstain from the use of alcohol for 24 hours prior to the scheduled start of the physical examination.

c. Specific Tests to be Performed

- (1) Hematocrit
- (2) Hemoglobin
- (3) Erythrocyte sedimentation rate
- (4) RBC indices
- (5) White blood cell count with differential

| (7) | Urinalysis | | | | | | |
|---------|--|---|--|--|--|--|--|
| (8) |) Serum creatinine | | | | | | |
| (9) |) Fasting plasma glucose | | | | | | |
| (10) | 2-Hour postprandial plasma glucos glucose) | e (accompanied by dipstick test for urine | | | | | |
| (11) | Urobilinogen | | | | | | |
| (12) | High resolution serum protein elect | rophoresis to detect adherent B cell clones | | | | | |
| (13) | Cholesterol & HDL cholesterol | | | | | | |
| (14) | Triglycerides | . • | | | | | |
| (15) | Bilirubin (total and direct) | | | | | | |
| (16) | AST | | | | | | |
| (17) | ALT | | | | | | |
| (18) | GGT | | | | | | |
| (19) | Alkaline phosphatase | | | | | | |
| (20) | LDH | | | | | | |
| (21) | Hepatitis A antibody | | | | | | |
| *(22) | Hepatitis B surface antigen | *Testing to be done by USAF on serum drawn | | | | | |
| *(23) | Hepatitis B, core antibody | and sent by the contractor | | | | | |
| *(24) | Hepatitis B, surface antibody | | | | | | |
| *(25) | Hepatitis C antibody | | | | | | |
| (26) \$ | Stool hemoccult (3 times) | | | | | | |
| (27) (| Creatine phosphokinase (CPK) | | | | | | |

(6) Platelet count

- (28) RPR; if positive, send serum to AL/AOELM, Brooks AFB
- (29) Lupus panel (contractor suggested tests)
- (30) Testosterone; total and free
- (31) Thyroid profile (T₄, TSH)

 The technique for TSH must be sensitive to hypo- as well as hyperthyroid conditions.
- (32) Prothrombin time
- (33) Serum insulin
- (34) Alpha 1 C hemoglobin
- (35) Rheumatoid Factor
- (36) Serum dioxin determination (to be done by the Centers for Disease Control) on a subset of up to 500 participants selected by the Air Force
- (37) Serum amylase
- (38) Serum ACTH
- (39) Serum LH
- (40) Serum FSH
- (41) Serum glucagon
- (42) Serum estradial
- (43) Sex hormone binding globulin (SHBG)
- **(44) Serum proinsulin
- **(45) Serum C peptide
- **To be done only on participants known to be diabetic (2-hr postprandial glucose > 140 mg/dl.)
- **(46) Islet cell antibodies

- d. The following immunological assays will be performed on blood from participants randomly selected using selection procedures outlined in Section 3.1.2.2.2 of the Statement of Work.
 - (1) CD3 cells (total T lymphocytes)
 - (2) CD4 cells (helper T cells)
 - (3) CD5 cells (B cell subset)
 - (4) CD8 cells (suppressor T cells)
 - (5) CD14 cells (monocytes)
 - (6) CD16/56 cells (NK cells)
 - (7) CD20 cells (B cells)
 - (8) CD25 cells (activated T cells)
 - (9) CD45 cells (to be used as a quality control marker)
- (10) Contractor will suggest an approach to detect T cell clones.
- (11) Protein profile
- (12) Delayed hypersensitivity skin tests
- (13) Data from double-labeled cells will be collected for the following combinations:
 - (a) CD3 with CD 25 (refinement of activated T cells)
 - (b) CD5 with CD 20 (B cell subset
 - (c) CD4/CD8 ratio
 - (d) CD4 with CD8 (abnormal or early T cells)
 - (e) CD3 with CD 16/56 (NK-like T cells)

| PARTICIPANT LABEL | CASE NUMBER | GROUP NUMBER |
|-----------------------|------------------|-------------------|
| | 0023490789 | 0023456789 |
| | 0023496789 | 0003460089 |
| | 0023456789 | EXAMINER I.D. NO. |
| | 0023496789 | 0023456789 |
| | 0023450789 | |
| | 000000000 | |
| CODER AFLIC 4 FARRILY | AND DEDCOMAL THE | TODY |



FORM AFHS-1 FAMILY AND PERSONAL HISTORY

YEAR 10 FOLLOW UP

| | | FAN | TILY HISTORY | | | | |
|--|-----|---|--|---|-------------|--|---|
| DARKEN NONE OR EACH | ş | | | TIVES | CURRENT FAI | | N |
| KNOWN OCCURRENCE OF: | Ĺ | GRANDPARENTS | PARENTS | SIBLINGS | | DREN | N |
| 1. ADOPTED 2. DIABETES 3. EPILEPSY 4. STROKE 5. HIGH BLOOD PRESSURE 6. HARDENING OF ARTERIES 7. HEART TROUBLE/ANGINA 8. BLOOD DISEASE 9. LEUKEMIA 10. LUNG CANCER 11. OTHER CANCER 12. SMOKING HISTORY 13. STOMACH TROUBLE 14. NERVOUS TROUBLE 15. SLEEPING TROUBLE 16. ALCOHOLISM 17. ALZHEIMER'S DISEASE 18. PARKINSON'S DISEASE 19. MENTAL DISTURBANCE(S) 20. ARTHRITIS 21. BIRTH DEFECTS 22. ALLERGIES 23. OTHER MEDICAL TROUBLES (M) COMMENTS? | 000 | MATERNAL PATERNAL O O O O O O O O O O O O O O O O O O O | MOTHER FATHER OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO | 000000000000000000000000000000000000000 | 000000000 | §0000000000000000000000000000000000000 | 000000000000000000000000000000000000000 |
| | | | | | | | |

| N +, 4, | | SI | JMMAR | Y O | F GE | NERA | L H | EALT | l QU | ALIT |
|--------------------------|---------|---------|-------------|--------------------------------|---------------|---------------|---------------|---------------|---------------------|----------------|
| RELAT | ON | LIVE | BIRTHS | | LIFET | IME H | EAL | TH IS/ | WAS | ? |
| 11000 | | # GIRLS | # BOYS | EXC | ELLE | NT GO | OD | FAIR | PO | OR |
| NATURAL N | OTHER | | | | <u> </u> | 0 | | 0 | 0 | |
| NATURAL F | ATHER | | | | O | 0 | . (| 0 | 0 | |
| SELF | | | | |) | 0 | (| 0 | 0 | |
| SPOUSE 1 | € | | | | <u> </u> | 0 | | 0 | 0 | |
| SPOUSE 2 | Θ | | | |) | 0 | (| 0 | 0 | |
| FAMILY ME | | AT | YEARS AT | IF DECEASED— CAUSE OF DEATH | | | | | | |
| B = BROTHE S = SISTER | R SEX | PRESENT | TIME | | CANCE | R A | CCIDE | NT | OTHER | |
| C = CHILD | F M | ALIVE? | DEATH? | HEAF | रा | STROKE | | SUICIDE | | ? |
| MOTHER | | | | 0 | 0 | 0 | O | 0 | 0 | \Box |
| FATHER | • | | | 0 | 0 | 0 | O | 0 | 0 | \overline{O} |
| 89© | ₽ M | | | 0 | 0 | | 0 | 0 | 0 | O |
| 890 | € M | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 88C | F M | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 00 | ℗℗ | | | 0 | 0 | 0 | 0 | 0 | 0 | \overline{O} |
| 89C | ℗℗ | | | 0 | 0 | 0 | 0 | 0 | 0 | O |
| (B)(S)(C) | (F) (M) | | | | $\overline{}$ | $\overline{}$ | $\overline{}$ | $\overline{}$ | $\overline{\wedge}$ | |

| LL | TI I | Ų, | ıξ | lä, | υl | J I | Ŀ |
|---------|------------|----|----|-----|----|-----|---|
| \odot | (N) | C | MC | M | EN | TS | ? |

| SUMMARY OF TREATMEN | MONTH/YEAR OF LAST EXAM |
|---|---|
| WERE ANY NEW ABNORMALITIES FOUND AT YOU | OUR LAST PHYSICAL EXAMINATION? |
| | TOTATAGETTE COR LONCER THAN 1 MONTH? |
| | TREATIVIENTS FOR LONGER THAN TWO ITE |
| ⊕ HAVE YOU EVER HAD A SERIOUS ILLNESS? | |
| HAVE YOU EVER HAD A SERIOUS INJURY? | e e de la companya del companya de la companya del companya de la |
| (N) HAVE YOU EVER HAD A SURGICAL OPERATION? | |
| | ALIZED? @①②③④⑤⑥⑦⑧⑨or more |
| YEAR AGE DESCRIPTION OF OPER | RATION/INJURY/ILLNESS MEDICATION/TREATMEN |
| | |
| | |
| | |
| | |
| P | ERSONAL HISTORY |
| DARKEN THE RIBBLE IE VOLLHAVE EVER EXPER | RIENCED ONE OF THE FOLLOWING CONDITIONS, OTHERWISE DARKEN (N |
| _ | YES NO |
| YES NO YES NO YES NO YES NO YES NO | ● MINOR ARTHRITIS ANY REPEATING |
| ™ TONSILLITIS | |
| © ® SINUSITIS © ® COLITIS | ⊕ ® SEVERE ARTHRITIS THE LAST YEAR? |
| © M GOITER © M HEMORRHOIDS | 요즘 하는 사람들이 살아 그를 그를 보고 있는 것이 되었다. 그는 사람들이 되었다. |
| MHAY FEVER MINISTER ON MINISTER STONES | |
| Ŷ® ASTHMA | |
| O BRONCHITIS O O O BLADDER TROU | |
| PLEURISY | |
| Y ® PNEUMONIA | ♥® VARICOSE VEINS |
| N TUBERCULOSIS N GONORRHEA | MORPHI FRITIS DESCRIBE OTHER SKI |
| MHEART TROUBLE MEANTING | ● HERNIA (RUPTURE) TROUBLE OR INFECTION |
| ® STOMACH TROUBLE ® FITS OR CONVU | JLSIONS (Y) (M) ANEMIA |
| © @ DEPRESSION | ⊘ ® POLIO |
| M GALLSTONES M NERVOUS BREA | AKDOWN Y MUMPS |
| M JAUNDICE M PARALYSIS | ⊘ @ MALARIA |
| We have the work of the second of the s | ⑨ @ GOUT |
| O MUSCLE WEAK | |
| Ŷ N ACNE (♥ NUMBNESS | ⑨ ® MEASLES |
| MEXCESS HAIR GROWTH ON LOSS OF SENSA | |
| O NO OTHER SKIN TROUBLE O NO LOSS OF SEX D |)RIVÉ |
| ® COMMENTS? | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | : |
| | |
| | ٠, |
| | |
| | |
| • | |
| | FORM OA AUDIT BY: DATE INITIALS |
| | FORM QA AUDIT BY: DATE INITIALS |

| Side 2 | SUMMA | RY OF HABITS | | | | | |
|---|---|----------------------------|--------------------------------------|--------------------|------------|--|--|
| | | | • | | | | |
| How often do you: | | less than 12 | 1-4 | 2-3 | doil. | | |
| use non-prescription stimulants | never O | times/year O | times/month | times/week | daily O | | |
| use non-prescription stimulants to stay alert (no-doze, etc) | _ | . 0 | 0 | 0 | 0 | | |
| use non-prescription sleep aids | 0 | 0 | 0 | 0 | 0 | | |
| use alcohol to help me sleep | 0 | _ | 0 | 0 | 0 | | |
| take tryptophan to help me sleep | 0 | 0 | | _ | | | |
| take vitamins | 0 | 0 | 0 | 0 | 0 | | |
| Please indicate below how much | you consum | e on a <u>weekly</u> b | asis each of th | ne following: | | | |
| (If your intake is less than once a | week for an | item than put a | "0" in the spa | ce provided) | | | |
| to12 oz. cups caffeinated co | offee a week | to | _ cigarettes a we | ek | | | |
| to12 oz. cups decaf coffee | | to | _ cigars a week | • | | | |
| to12 oz. cups caffeinated te | a a wee k | to | _ bowls of pipe to | obacco a week | | | |
| to12 oz. cups decaf tea a w | eek | to | _ pinches of chev | w a week | | | |
| to12 oz. cans sugar cola a | week . | to | to12 oz. cans of regular beer a week | | | | |
| to12 oz. cans decaf cola a v | vee k | to | _12 oz. cans of li | ght beer a week | | | |
| to12 oz. cans diet cola a we | ek | to | _ 4 oz. glasses o | f wine a week | . ! | | |
| to12 oz. cans decaf diet cola a week to mixed drinks a week | | | | | | | |
| to12 oz. cups bottled water a week to oz. unmixed liquor a week | | | | | | | |
| to12 oz. cups tap water a w | eek | | | | | | |
| Which of the following do you use m in your coffee? (Choose one from ea | | P P | | ree following fo | od | | |
| | | typ€ | s do you prefer | most? | | | |
| O sugar O cream O saccharin O milk | | .0 s | teak, salty foods | ; | | | |
| | nar | Ot | read, sweets | | | | |
| | 1101 | 00 | lairy products | | | | |
| | | | - | | | | |
| Which of the following do you use m in your tea? (Choose one from each | | 1 | | hest energy per | | | |
| | | occi | ur / (cnoose <u>one</u> | of the following |) | | |
| O sugar O cream O saccharin O milk | | 0 6 | nergetic all day | | | | |
| O equal O powdered crear | O following meals (especially breakfast and dinner) | | | | | | |
| O n/a O n/a | O first thing in the morning | | | | | | |
| 1 102 | | | | | | | |
| Yes No | | | | | | | |
| O Do you have any physical or nervous complaints or concerns? | | | | | | | |
| O O Do you have any allergies of medicines, foods, plants, o | or severe react hemicals, etc? | ions to: Please specify | below. | | | | |
| Comments : | | | Į. | orm QA audit | | | |
| | | | F | 0# Initials) 3 | Date | | |
| | | | 106 | | | | |

| PARTICIPANT LABEL | CASE NUMBER | | ROUP NUMBER | ME | | |
|---|-------------------------|----------------------|---|------------------|--|--|
| | 0000000 | | 000000000000000000000000000000000000000 | | | |
| | 0000000 | | 00000000 | 의 원 등 개 | | |
| | | | XAMINER I.D. 12346070 | n \ | | |
| · | 0000000 | | 000000000000000000000000000000000000000 | | | |
| | 0000000 0000000 | | 000000000000000000000000000000000000000 | <u> </u> | | |
| | D PERSONAL HIS | | | YEAR 10 | | |
| FORTI AFHS 18 FAMILY AN | D PENSONAL MIS | | | FOLLOW UP | | |
| GENERAL HEAL | TH QUALITY OF FAMI | LY MEMBERS (| CONTINUED | | | |
| PLEASE NOTE: Only add those family | members who you were | unable to record | on the orange | | | |
| sheet because of a la | ck of space - you do no | t have to repeat ar | ny relatives. | | | |
| Family members Age in years | K daaaa | and the state of the | e cause of death? | | | |
| B = Brother Sex Present time | | | | | | |
| C = Child F M if alive of dea | | stroke accide | nt suicide other | ? | | |
| (B) (S) (C) (F) (M) | 18 8 | 8 8 | - 8 - 8 - | - 8 | | |
| 8 9 0 F W | - 8 8 | 8 8 | 8 8 | Q | | |
| (a) (c) (c) (d) (d) | | -8 | - 8 - 8 - | - 8 - | | |
| | 8 8 | 8 8 | 0 0 | | | |
| (B) (C) (P) (M) | | 8 8 | - 8 - 8 - | 8 | | |
| 8 6 C P M B C P M | 8 8 | 8 8 | 0 0 | Q | | |
| (R) (S) (C) (F) (M) | | O | 0 0 | <u> </u> | | |
| Comments : | | | | | | |
| | | | | | | |
| | | | | | | |
| My natural mother gave birth tobo | vs and girls I was | the th child l | born. | | | |
| I have sired boy children and | | | | | | |
| | | LEICURE HOUR | | | | |
| SUMI | TARY OF WORK AND | LEISURE HOUR | В | | | |
| Iwill retire/ did retire from milit | ary service on : | at age | years. | | | |
| Iwill retire/ did retire from work | as a civilian on: | at age | years. | | | |
| | (monti | n/year) | | | | |
| I sleep hours per night during | the workweek and | hours on other ni | ights. | | | |
| I take naps times per week for | an average of | _ hours per week. | | | | |
| If currently employed, please complete | the following: | | | | | |
| 1. I work hours per day days per week. | | | | | | |
| 2. I average hours paid overtime per week hours unpaid overtime per week. | | | | | | |
| 3. receive vacation of | | | | | | |
| | MARY OF BODY WE | | | | | |
| 14 | the and the | | | | | |
| My current weight range is between | | | | | | |
| My preferred weight range is between | | | and vears | | | |
| The most I ever weighed was lb | | | | | | |
| The most fit I have ever been was between ages and years, when | | | | | | |
| I weighed lbs and was | | | | | | |
| The most weight I ever lost during one pe | | _ | Depression O | Other | | |
| O Illness/Injury O Stress | O Dieting O | Exercise O | Debiession OC | /4101 | | |

Comments:

| PARTICIPANT LABEL | CASE NUMBER | GROUP NUMBER |
|-------------------|-------------|------------------|
| | 0023490789 | 002345678 |
| | 000300000 | |
| - | 0023460789 | |
| | 0023460789 | 002345678 |
| | 0023460989 | 002346698 |
| | 0023490789 | |



FORM AFHS-2A

REVIEW OF SYSTEMS

YEAR 10 FOLLOW UP

Please ANSWER ALL QUESTIONS. If in doubt, GUESS Yes or No.

If you are bothered by or concerned about the following conditions, darken the \odot (YES) Bubble. Otherwise mark \odot for NO.

The Doctor or Nurse will ask about the details later.

| QUESTIONNAIRE | | |
|---|-------------------------------|---|
| | HAVE YOU COMMENTED BELOW? (N) | |
| (Y) (N) ANY FOODS THAT TEND TO | | |
| DISAGREE (WHICH ONES?) | | |
| (Y) (N) FREQUENT ITCH OR RASH? | | |
| (WHERE/WHEN?) | | |
| (Y) (N) SWELLING, LUMP OR SORENESS | | |
| ANYWHERE ON BODY? (WHERE?) | | |
| (V) (N) NUMBNESS OR TINGLING? | | |
| (WHERE?) | | |
| (Y N TWITCHING MUSCLES? | | |
| (WHERE?) | | • |
| HOW MANY TIMES DO YOU | <u> </u> | |
| | 0023456789OR MORE | |
| YES NO | Q1 - 60 COMMENTS? - Y N | YES NO |
| (Y) (N) 1. SEVERE HEADACHES OR HEAD PAINS | | (Y) (N) 31. WORRIED ABOUT YOUR HEART |
| (Y) (N) 2. ANY DISTURBANCE IN VISION | 1 | (Y) (N) 32. BLOOD PRESSURE TOO HIGH |
| (Y) (N) 3. PAIN OR DISCOMFORT IN EYES | ł | (Y) (N) 33. BLOOD PRESSURE TOO LOW |
| (Y) (N) 4. WEAR GLASSES (OR CONTACT LENSES? | 57) | (Y) (N) 34. PAINS IN HEART OR CHEST |
| (Y) (N) 5. CONSTANT NOISE IN EARS | | (Y) (N) 35. POUNDING OR SKIPPING OF HEART |
| (Y) (N) 6. HARD OF HEARING | | (Y) (N) 36. HEART STARTS RACING SUDDENLY |
| (Y) N) 7. EAR ACHE WITH COLDS | | (Y) (N) 37. SHORTNESS OF BREATH OR WHEEZING |
| (Y) (N) 8. EAR ACHE WITH PLANE FLIGHTS | | (Y) (N) 38. TROUBLE GETTING A DEEP BREATH |
| (Y) (N) 9. CHRONIC RUNNING EARS | | (Y) (N) 39. SWELLING ANKLES |
| (Y) (N) 10. CHRONIC STUFFY OR RUNNY NOSE | 1 | (Y) (N) 40. LEG CRAMPS IN BED OR SITTING STILL |
| (Y) (N) 11. NEED TO USE NOSE DROPS FREQUENTLY | ıy | (Y) (H) 41. LEG CRAMPS WHILE WALKING |
| (Y N) 12. BAD NOSE BLEEDS AT TIMES | | (Y) (N) 42. PAIN OR TROUBLE WITH SWALLOWING |
| (Y) (N) 13. FREQUENT SEVERE COLDS OR SORE TH | HROAT | (Y) (H) 43. POOR APPETITE RECENTLY |
| (Y) (N) 14. ANY KNOWN DENTAL PROBLEMS | | (Y) (N) 44. POOR APPETITE ALWAYS |
| (Y) (N) 15. SORENESS OR BLEEDING OF GUMS | | (Y) (N) 45. NAUSEA OR VOMITING |
| (Y) (N) 16. MORE THAN A YEAR SINCE TEETH CHEC | CKED | (Y) (N) 46. VOMITING OF BLOOD |
| (Y) (N) 17. SORE MOUTH OR TONGUE | | (Y) (N) 47. BELCHING, BLOATING OR INDIGESTION |
| (Y) (N) 18. GOITER OR THYROID TROUBLE | | (Y) (N) 48. YELLOW SKIN OR EYES (JAUNDICE) |
| (Y) (N) 19. THYROID TEST TOO HIGH | | (*) (*) 49. BURNING OR HUNGER PAINS IN STOMACH |
| (Y) (N) 20. THYROID TEST TOO LOW | | (Y) (N)50. USE ANTACIDS FOR STOMACH BURNING |
| (Y) (N) 21. FEELING OF LUMP IN THE THROAT | | (Y) (N) 51. SORENESS OR PAIN IN STOMACH, ABDOMEN |
| (Y) (N) 22. NEED TO TAKE THYROID MEDICINE | | (Y) (N) 52. SUSPECT ULCERS OR STOMACH TROUBLE |
| (Y) (N) 23. HOARSENESS AT TIMES | | |
| (Y) (N) 24. RECENT OR CHRONIC COUGH | | (Y) (N)53. CRAMPS IN STOMACH OR LOW DOWN |
| (Y) (N) 25. CHRONIC COUGHING UP OF SPUTUM | | (V) (N) 54. LOOSE BOWELS OR DIARRHEA |
| (Y) (N) 26. EVER COUGHING UP OF SPUTUM | | (V) (N) 55. BLACK OR TARRY STOOLS (BOWEL MOVEMENT |
| | | (N) 66. FRESH OR BRIGHT BLOOD WITH STOOLS |
| (N) (N) 27. ACHE ALL OVER | | (*) (N) 57. MUCUS (SLIME OR PHLEGM) IN STOOLS |
| (*) (*) 28. HAVING CHILLS OR FEVER | | (Y) (N)58. CONSTIPATION |
| (N 29. SEVERE SOAKING NIGHT SWEATS | | |
| (N) 30. LIVED WITH ANYONE HAVING T.B. | | |
| | 1 | |

PLEASE DO NOT MARK IN THIS SPACE

| QUESTIONNAIRE (CONTINUED) | Q61 - 118 COMMENTS? | M | YES NO |
|--|---------------------|----------|--|
| YES NO | U61-118 COMMENTS: | | (Y) 91. NAIL BITING |
| (Y) (N) 61. RECENT CHANGE IN BOWEL HABITS | | 1 | (Y) (N) 92. SLEEP WALKING |
| (N62. RECTAL TROUBLE OR PAIN | | 1 | (Y) (N) 93. BED WETTING AFTER AGE 12 |
| (N) 63. PAIN IN THE KIDNEY REGION | | 1 | (Y) (N) 94. CHRONICALLY TIRED OR OVERWORKED |
| (N) 64. BLOOD OR PUS IN URINE | | - 1 | (*) (*) 94. CHRONICALLY TRILLS ON OVERWOOMED |
| (N) 65. ALBUMIN IN URINE | | 1 | (Y) (N) 96. CAN'T GO TO SLEEP OR STAY ASLEEP |
| (N) (N) 66. SUGAR IN URINE | | 1 | (Y) 97. NEARLY ALWAYS IN POOR HEALTH |
| (N) 67. SPELLS OF FREQUENT URINATION | | 1 | (Y) (N) 98. CONSIDERED TO BE A NERVOUS PERSON |
| (N) 68. SEVERE BURNING OR PAIN ON URINATION | | - 1 | (Y) (9) 99. FROM SICKLY OR NERVOUS FAMILY |
| (M) 69. PAINS OVER BLADDER OR LOW DOWN | | 1 | (*) (*) 100. TREMBLE AND SWEAT EASILY |
| N 70. TROUBLE STARTING URINE | | - 1 | (Y) (N) 101. HAVE TROUBLE MAKING UP YOUR MIND |
| (V) (N) 71. URINARY STREAM HAS BECOME WEAK | | | (Y) (N) 102. EASILY MIXED UP OR CONFUSED |
| (N) 72. HARD TO EMPTY BLADDER COMPLETELY | | | (Y) (N) 102. EASILY MIXED UP ON CONPUSED (Y) (N) 103. CLUMSY OR HAVE FREQUENT ACCIDENTS |
| (∀) (₩) 73. LOSE CONTROL OF PASSING URINE | | 1. | |
| (PRIVATES) | • | - 1 | (Y) (N) 104. FEEL SAD, LONELY OR DEPRESSED |
| N 75. SWOLLEN OR PAINFUL JOINTS | | - | (W) 105. CRY OFTEN |
| (Y) (N) 76. STIFFNESS OF MUSCLES OR JOINTS | | | (Y) (N) 106. WISH I WERE DEAD |
| (Y) (N) 77. SEVERE PAINS IN ARMS OR LEGS | | | (™) 107. WORRY CONTINUALLY |
| (♥ (N)78. PAINFUL FEET | | 1. | (Y) N 108. UPSET BY LITTLE THINGS |
| (♥ (N) 79. BACKACHE | | Į. | (Y) (N) 109. A PERFECTIONIST |
| (Y) (N) 80. PAINS IN NECK | | 1 | (*) (*) 110. SENSITIVE OR FEELINGS EASILY HURT |
| (♥ (N)81. EASY TO SUNBURN | | | () () TITL OFTEN MISUNDERSTOOD |
| (V) (N) 82. SUBJECT TO ACNE | | Ĭ. | (N 112. OFTEN ACT ON SUDDEN IMPULSE |
| (Y) (N) 83. SUBJECT TO BOILS OR INFECTION | | | () 113. EASILY ANGERED OR HAVE VIOLENT RAGES |
| (Y) (N) 84. SUBJECT TO ATHLETE'S FOOT, SKIN FUNGUS | | | (N 114. FREQUENTLY KEYED UP AND JITTERY |
| (Y) (N) 85. SUBJECT TO HIVES OR SKIN REACTIONS | | - 1 | (N 115. EASILY SCARED BY SUDDEN NOISE |
| (Y) (N) 86. EASY BLEEDING OR BRUISING | | - 1 | (Y) (N) 116. HAVE BAD DREAMS OR THOUGHTS |
| (Y) (N) 87. MOLE OR SORE WHICH IS NOT HEALING | | - 1 | () () 117. SUSPECT A SERIOUS DISEASE OR CANCER |
| (Y) (N) 88. SEVERE DIZZINESS | | 1 | N 118. HAVING TROUBLE GETTING ALONG WITH SOMEONE AT HOME OR AT WORK |
| (Y) (W) 89. GENERALIZED WEAKNESS | | 1 | SOMEOME AL HOME OF AL HOME |
| | | | · |

REVIEWER'S COMMENTS:

| | 5.477 | INITIALS |
|-------------------|-------|----------|
| FORM QA AUDIT BY: | DATE | INITIALS |
| D103366 | | |
| | | |
| i | | |
| 1 | | 1 |
| | | 1 |

| PARTICIPANT LABEL | CASE NUMBER | GROUP NUMBER |
|-------------------|-------------|---------------|
| | 0000000000 | 0023456789 |
| | 0000000000 | 0023496789 |
| | 0000000000 | EXAMINER I.D. |
| | 0000000000 | 0000000000 |
| • • • | 00000000000 | 0023496789 |
| | 0000000000 | 0023060789 |
| • | | |



FORM AFHS-3A PHYSICAL EXAMINATION (PART 1)

YEAR 10 FOLLOW UP

| PPEARANCE | APPEARANCE VS STATED AGE | APPEARANCE OF ILLNESS OR DISTRESS | HAIR DISTRIBUTION |
|------------------------------|------------------------------|-----------------------------------|----------------------|
| OWELL NOURISHED | OSAME AS | Оио | ONORMAL |
| OOBESE OUNDER NOURISHED | Oolder Than Oyounger Than | OYES | OABNORMAL |
| OUNDER NOURISHED OCCUMENTS? | OYOUNGER THAN | OYES | OABNORMAL |

NOTE: FILL IN VITAL SIGNS WITH MAXIMUM VALUES IF REFUSED.

| VITAL SIGNS | | | | | | | | | |
|---|-----------------------------|---|--|--|---|--|--|--|--|
| HEIGHT CM . WEIGHT (UNDRESSEE KG | TEMPERA- TURE ORAL *F | NONDOMINANT A | DIASTOLIC | PULSE RATE | PBs PER MINUTE | PULSE IS: OREGULAR | | | |
| 00 0000 0000 0000 0000 0000 0000 0000 | 22 | 000 000 000 000 000 000 000 000 000 | 00000000000000000000000000000000000000 | 00000000000000000000000000000000000000 | 000000000000000000000000000000000000000 | OIRREGULAR OIRREGULARLY IRREGULAR ① (A) COMMENTS? | | | |

| (AM YES ⑦ | NO (N) | | YES | | RNAL OBSERVATION |
|-----------------|---|---|-----------------------|-----------------------|------------------------------|
| YES ⑦ | | | VEC | | |
| | _ | HEMORRHAGES | ® | NO (N) | ARCUS SENILIS PRESENT |
| © | (N) | EXUDATES | © | (N) | ABNORMAL OCULAR PIGMENTATION |
| \odot | (N) | DISK PALLOR | | | · |
| ® | (N) | ↑ CUPPING | | | |
| ⊕ ONLY | (N) | DIABETIC RETINOPATHY | | | |
| | | | | | |
| • | 99999 | ØØØØØ | ② | ② | |

| © = NO OR NONE © = YES © = REFUSED | ES (X) = COULD NOT EXAMINE (L) = LEFT (R) = RIGHT | PHYSICAL (FORM 3 | EXAMINAT PART 1 S | TION IDE 2) | |
|--|---|--|---|--|-------------------------------|
| ENT ARE ONORMAL OABNORMAL OREFUSED © @COMMENTS? | EAR IRRIGATED | EMBRANE INTACT? D TO REMOVE WAX? SA ULCERATED? | LEFT @(9) (8) (9) (8) (9) | RIGHT (N) (V) (N) (N) (N) (N) (N) (N) (N) (N) (N) (N | |
| NECK AREA IS ONORMAL OABNORMAL OREFUSED | CAROTID BRUI CAROTID PULS | | | @0 @0 @0 | |
| THYROID GLAND | PALPABLE ENLA N Y N | RGED NODULES | | OTHER ® | |
| | | • | | | |
| | THORAX AND LUNGS. | | CIRCUMFE | RENCE (CM) 。 | |
| ONORMAL OABNORMAL OREFUSED ©®COMMENTS? | (Y) (N) ASYMMETRICAL II (Y) (N) HYPERRESONANCE (Y) (N) DULLINESS (Y) (N) WHEEZES (Y) (N) RALES (NOTE LOCATION) (Y) (N) SUSPECTED COPE (DESCRIBE) | EE 000 000 000 000 000 000 000 | © © © O O O O O O O O O O O O O O O O O | INSPIRATION 000 | NECK |
| | | HEART | | ζ. | |
| HEART EXAM IS: ONORMAL OABNORMAL OREFUSED | OYES, SUS OYES, ORG | BABLY FUNCTIONAL PECT ORGANIC GANIC | TO V PROJE | CATE CHEST AREA(NHICH MURMUR WA CTED MOST INTENS RK Ns IF NO MURMU SYSTOLIC R | AS SELY. JR) ASTOLIC |
| N PRECORE | ED APICAL IMPULSE? DIAL THRUST? | ® ^{\$3} ♡ ® ^{\$4} ♡ | | | 9 0 |
| (Y) (N) HEART COMMEN | rs? | | FORM COUNTIERS: | DA AUDIT DONE BY: INITIALS 6 | DATE |

| PARTIC | IPANT LA | REI | | CASE | NUMBER | | GROUE | NUMBER | | |
|---|--|--|--|-------------------------------|---|---|--|--------------------------|-----------|---------------|
| PARTIC | M AIT LA | ULL . | | | 3466 | 789 | | 34667 | <u> </u> | MARIA |
| | | | | | 3066 | | | 30667 | | 19 至 |
| | | | | | 3456 | | EXAN | IINER I.D. | | |
| | | | | 0000 | 3066 | 7 ®9 | | 30607 | | CEL STREET |
| | | | | | 3000 | | | 30000 | | - |
| | | | | | 3056 | | | <u> 90000</u> | | EAR 10 |
| FORM AFF | IS-3B F | PHYSIC | ALE | | | N (PAR | T 2) | | | LLOW-UP |
| ♥ ®ABDOMEN ABI | NORMALITY | COMMENTS | 57 | ABL | OMEN | | | | | |
| y GADDOMEN AD | TOTAL T | COMMILITY | J. | | | | | • | | |
| | | | | | | *** | | 1000 | | |
| | YES NO | HEPATOME | EGNIV | | тс | TAL LIVER S | PAN | 000 | | см 0 Ø Ø 9 |
| ONORMAL | 000 | LIVER TEN | | 1 | O ON | AASS SIZE III | NITS LOCA | TION, TYPE, (| | |
| OABNORMAL | ŏŏ | SPLENOM | | , | | inos size, s | 4113, EOG | | SOMMEN | |
| OREFUSED | ŏŏ | SPLEEN TE | | SS | | | | | | |
| O | ŏŏ | OTHER MA | | | → | | | | | |
| | | | | EXTR | EMITIES | | | | | |
| _ | | PITT | | NON-P | | CLUBBEI | | | Te | OE HAIR |
| UPPER | MPUTATION(R () R | (S) EDE (N) (L | | EDE (N) (E | | NAILS (N) (L) (R) | | ARICOSITIES (N) (L) (R) | | LOSS |
| LIMBS | | | | • | - | MB ONLY, R = | | | | |
| LOWER | | | | | | • | | | _ | |
| LIMBS | $\Theta \cup \Theta$ | ® @ | .) (B) | ® (0 | .)® | $\Theta \mathbb{C} \mathbb{B}$ | | WUB | • | 908 |
| EXTREMITY EXAM | M WAS: | ONOR | MAL | OABN | ORMAL | OREFUSE | | | | |
| NDESCRIBE ABS | ENCES &/OF | R ABNORMA | LITIES | | | | | | | |
| | | | | | | | , | | | |
| | | | | | | | | | | |
| | | | | PERIPHER | AL PULS | ES | | | | |
| N L RFEMORAL | | | Į | PERIPHER | AL PULS | ES | | | | |
| (N = NONE, L = LEF | T, R = RIGHT) |) | | | | | | RSALIS | | STERIOR |
| | T, R = RIGHT) RAD |) DIAL | FEN | /IORAL | P0 | PLITEAL | | PEDIS | | ΠΒΙΑL |
| (N = NONE, L = LEF | T, R = RIGHT) |) | | | | | | | | |
| | T, R = RIGHT) RAD |) DIAL | FEN | /IORAL | P0 | PLITEAL | | PEDIS | | ΠΒΙΑL |
| (N = NONE, L = LEF | T, R = RIGHT) RAD LEFT |) DIAL | FEN | /IORAL | P0 | PLITEAL | | PEDIS | | ΠΒΙΑL |
| (N = NONE, L = LEF NORMAL DIMINISHED | RAD LEFT O | PIAL RIGHT O | LEFT O | NORAL RIGHT | PO LEFT O | PLITEAL RIGHT O | <u>ш</u> | RIGHT | LEFT O | RIGHT |
| (N = NONE, L = LEF NORMAL | T, R = RIGHT) RAD LEFT | RIGHT | FEN LEFT O | NORAL RIGHT | PO LEFT O | PLITEAL RIGHT | LEFT O | RIGHT | LEFT O | RIGHT |
| NORMAL DIMINISHED ABSENT COULD NO | T, R = RIGHT) RAD LEFT O O | PIAL RIGHT O | LEFT O | NORAL RIGHT | PO LEFT O | PLITEAL RIGHT O | <u>ш</u> | RIGHT | LEFT O | RIGHT |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE | T, R = RIGHT) RAD LEFT O O T | PIAL RIGHT O O O | LEFT O O | RIGHT O | PO LEFT O | PLITEAL RIGHT O O | 0 | RIGHT O O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE | T, R = RIGHT) RAD LEFT O O T | PIAL RIGHT O O O | LEFT O O | RIGHT O | PO LEFT O | PLITEAL RIGHT O O | 0 | RIGHT O O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE | T, R = RIGHT) RAD LEFT O O T | PIAL RIGHT O O O | LEFT O O | RIGHT O | PO LEFT O | PLITEAL RIGHT O O | 0 | RIGHT O O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE | T, R = RIGHT) RAD LEFT O O T | PIAL RIGHT O O O | LEFT O O | RIGHT O O O O | PO LEFT O | PLITEAL RIGHT O O O O | UEF O O O ⊗ | RIGHT O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMME | T, R = RIGHT) RAD LEFT O O T NTS | PIAL RIGHT O O O O | LEFT O | RIGHT O O O | PO LEFT O O S JLATURE NO YES | PLITEAL RIGHT O O S CNE | 0 | RIGHT O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMMEN | T, R = RIGHT) RAD LEFT O O T | RIGHT O O O | LEFT O O O O O O O O O O O O O O O O O O O | RIGHT O O O | PO LEFT O O O S JLATURE NO YES O O | PLITEAL RIGHT O O S CNE X | UEF O O O ⊗ | RIGHT O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMMENT ONORMAL ABNORMAL | T, R = RIGHT) RAD LEFT O O T ® NTS STRAIGHT ANY WEAL | RIGHT O O O O E E E E E E E E E E E E E E E | LEFT O O O ⊗ ABNORM/ED? | RIGHT O O O | LEFT O O O S | PLITEAL RIGHT O S CNE X X | UEF O O O ⊗ | RIGHT O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMMENT ONORMAL ABNORMAL | T, R = RIGHT/ RAD LEFT O O O T STRAIGHT ANY WEAL ANY TEND | RIGHT O O O O O O E O O O O O O O O O O O O | LEFT O O O O O O O O O O O O O O O O O O O | RIGHT O O O | PO | PLITEAL RIGHT O S CNE S S S S S S S S S S S S S | UEF O O O ⊗ | RIGHT O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMMENT ONORMAL ABNORMAL | T, R = RIGHT) RAD LEFT O O T STRAIGHT ANY WEAI ANY TEND ANY ATRO | PIAL RIGHT O O E E E E E E E E E E E | LEFT O O O O O O O O O O O O O O O O O O O | RIGHT O O O | PO | PLITEAL RIGHT O O S CNE X X X X X X X X X X X X X | UEF O O O ⊗ | RIGHT O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMMEN | T, R = RIGHTI RAD LEFT O O O T STRAIGHT ANY WEAI ANY TEND ANY ATRO ABNORMA | RIGHT O O O O E E E E E E E E E E E E E E E | LEFT O O O O O O O O O O O O O O O O O O O | RIGHT O O O | PO LEFT O O O S JLATURE NO O O O O O O O O O O O O O O O O O O | RIGHT O O O O O O O O O O O O O O O O O O O | UEF O O O ⊗ | RIGHT O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOTEXAMINE OPULSE COMMENT ONORMAL ABNORMAL | T, R = RIGHTI RAD LEFT O O O T STRAIGHT ANY WEAI ANY TEND ANY ATRO ABNORMA | PIAL RIGHT O O E E E E E E E E E E E | LEFT O O O O O O O O O O O O O O O O O O O | MUSCU | PO LEFT O O | PLITEAL RIGHT O O S CNE X X X X X X X X X X X | UEF O O O ⊗ | RIGHT O | 0 0 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NO | T, R = RIGHTI RAD LEFT O O O T STRAIGHT ANY WEAI ANY TEND ANY ATRO ABNORMA | RIGHT O O O O E E E E E E E E E E E E E E E | ABNORM/ED? | MORAL RIGHT O O O O O O O S | PO | RIGHT O O O O O O O O O O O O O O O O O O O | LEFT O O ® | RIGHT O O O S ENTS? | © 0 0 8 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMMENT NORMAL ABNORMAL REFUSED | T, R = RIGHT) RAD LEFT O O T STRAIGHT ANY WEAI ANY TEND ANY ATRO ABNORMA OTHER ABI | RIGHT O O O O E E E E E E E E E E E E E E E | LEFT O O O ABNORM/ ED? OTED? OTED? OTED? OTED? OTED? | MUSCL | LEFT O O O O O O O O O O O O O O O O O O O | RIGHT O O S CNE S S AL TENDERN | LEFT O O ® | RIGHT O | © 0 0 8 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMMENT ONORMAL ABNORMAL REFUSED | T, R = RIGHT) RAD LEFT O O O T ® NTS STRAIGHT ANY WEAI ANY TEND ANY ATRO ABNORMA OTHER ABI ANY SCOL | RIGHT O O O O E E E E E E E E E E E E E E E | LEFT O O O ABNORM/ ED? OTED? OTED? OTED? OTED? OTED? OTED? | MORAL RIGHT O S MUSCL AL? | LEFT O O O O O O O O O O O O O O O O O O O | RIGHT O O O O O O O O O O O O O O O O O O O | LEFT O O O O O O O O O O O O O O O O O O O | RIGHT O O O S ENTS? | © 0 0 8 | RIGHT O |
| NORMAL DIMINISHED ABSENT COULD NOT EXAMINE OPULSE COMMENT NORMAL ABNORMAL REFUSED | T, R = RIGHT) RAD LEFT O O O T ® NTS STRAIGHT ANY WEAI ANY TEND ANY ATRO ABNORMA OTHER ABI ANY SCOL | RIGHT O O O O O O O O O O O O O O O O O O O | ABNORM/ED? PINCY? PINCY | MORAL RIGHT O S MUSCU AL? | PO LEFT O O O O O O O O O | RIGHT O O S CNE S S S AL TENDERN ONE NOTED ERVICAL ARE | LEFT O O ⊗ | RIGHT O O O S ENTS? | © 0 0 8 | RIGHT O |
| NORMAL NORMAL DIMINISHED ABSENT COULD NOTEXAMINE OPULSE COMMENT ONORMAL ABNORMAL ONORMAL ONORMAL ONORMAL ONORMAL ONORMAL ONORMAL | T, R = RIGHT) RAD LEFT O O O T STRAIGHT ANY WEAL ANY TEND ANY ATRO ABNORMA OTHER ABI ANY SCOL ANY KYPH PELVIC TILI | RIGHT O O O O O O O O O O O O O O O O O O O | ABNORM/ED? | MORAL RIGHT O S MUSCL AL? | LEFT O O O O O O O O O O O O O O O O O O O | RIGHT O O O O O O O O O O O O O O O O O O O | ESS ♥® | RIGHT O O O S ENTS? | © 0 0 8 | RIGHT O |
| NORMAL ONORMAL | T, R = RIGHT) RAD LEFT O O O T STRAIGHT ANY WEAL ANY TEND ANY ATRO ABNORMA OTHER ABI ANY SCOL ANY KYPH PELVIC TILI | RIGHT O O O O O O O O O O O O O O O O O O O | ABNORM/ED? | MUSCI AL? | PO | RIGHT O O O O O O O O O O O O O O O O O O O | ESS (♥ ® | RIGHT O O O S ENTS? | © 0 0 8 | RIGHT O |

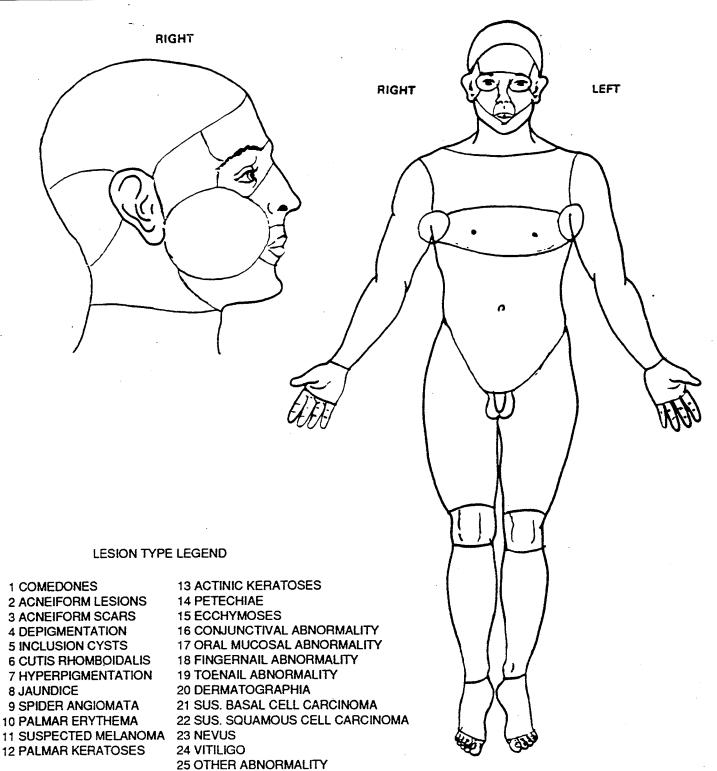
| | | GENITO | URINARY EXA | MA | (PE P | ART 2 CON | TINUED) |
|---|--|--------------|--|--------------|---------------------------|------------|---------|
| | URINARY (AM | TEMES | • | | - | | |
| ONO | | TESTES | ENLARGED | NODULE | ATROPHIC | ABSENT | OTHER |
| OABI | NORMAL . | LEFT O | 0 | 0 | | 0 | 0 |
| OREF | USED | RIGHT (| 0 | O | O | .0 | O |
| | FUSED | | | NO REFUSI | | | |
| Ø N R Ø N R Ø N R | RIGHT INGUINAL HERNIA | ? | | | ARICOCELE IDIDYMAL ABI | NORMALITY | |
| 9 8 8 9 8 8 | LEFT INGUINAL HERNIA? SCROTAL MASS PRESEN | T? | | 30000 | | | ZE |
| | | | | | METER IN CM) | | |
| ™ COMMENTS | | | | • | · · · | | |
| T (I) COIVINIENTS | • | | | | | | |
| | | | | | | • | |
| | | REC | TAL EXAM | | | | |
| RECTAL EXAM | HEMORRHOIDS | NONE APPAREN | | BLEED | ING THRO | OMBOSED | OTHER |
| ONORMAL | EXTERNAL | 0 | 0 | 0 | | 0 | \circ |
| OABNORMAL OREFUSED | INTERNAL | 0 | 0 | 0 | , | 0 | O |
| One oce | | REFUSED | | | | | |
| | 0 0 0 | | NLARGEMENT? | | | | |
| ™ ® COMMENTS: | , 000 |) RECTAL MAS | 5(E5)? | | | | |
| | • | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | LYM | PH NODES | | -: | | |
| ONORMAL | CERVICAL | NORMAL EN | LARGED TENDI | | | | OTHER |
| ONOMINAL | OCCIPITAL | ŏ | | ŏ | ŏ | 0 | |
| OABNORMAL | SUPRACLAVICULAR | 0 | 000 | Q | 0000 | 00 | 000 |
| OREFUSED | AXILLARY EPITROCHLEAR | 00 | | 0 | \mathcal{O} | 0 | 00 |
| Cherosed | INGUINAL | ŏ | 000 | 000000 | ŏ | ŏ | 000 |
| | FEMORAL | O | 0 0 | | O | 0 | 0 |
| ™ COMMENTS: | | | | | | | |
| | | • | | | | | |
| | | | | | | | |
| | | | | | | | |
| | SUMMARY OF | | | OK RECO | MIMENDE | | |
| | IMARY OF FINDINGS NTIRE EXAM WAS: | (A) | OMMENTS: | | | | |
| OALL NORM | | 1 | | | | | |
| · · | WITH NOTED VARIATIONS | | | | | | |
| • | AL AS SUMMARIZED ENTIRE EXAM | | | | | | |
| J. 1.2. 03LD | | | | | | • | |
| | THER TESTS INDICATED? | | | | • | | |
| | THER TESTS ORDERED? TESTS DESCRIBED? | | | | | · | |
| O | | | remarks the experience of the state of | | | | |
| PARIL S.A. S. | UDIT DV. | | RINTED NAME O | E EY AMINING | PHYSICIANI | INITIALS / | DATE |
| FORM QA A | | | THE LED ISMINE U | I FVWIMING | IIIJICIAN | / | |
| | | | | | | | - |
| DATE: | | | -20 | | | | • |
| | 2 | C | -zu | | | | |

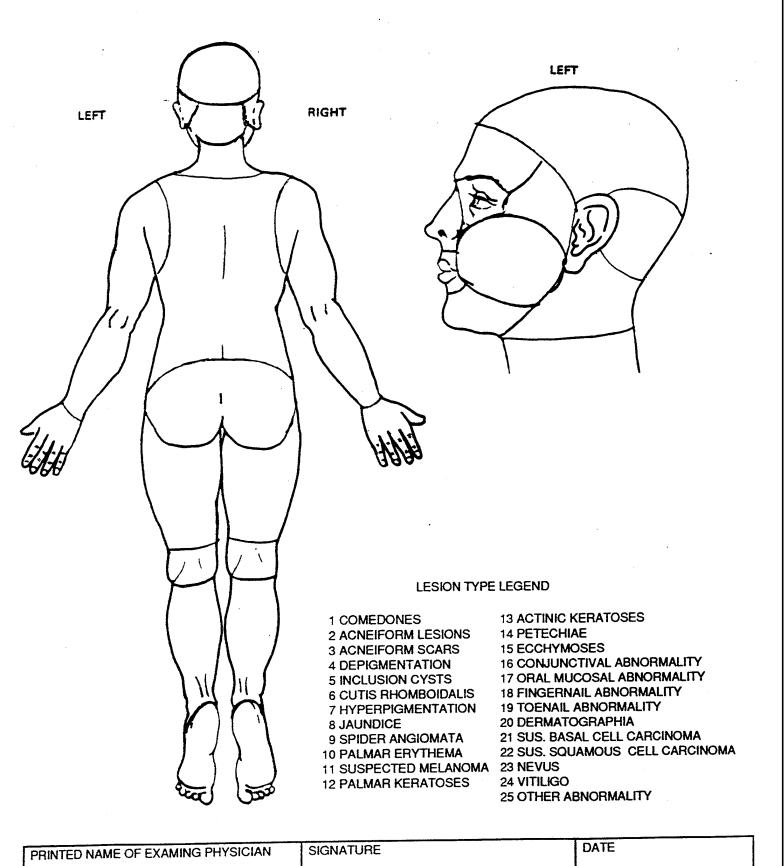
| | PA | RTICI | PANT LABEL | С | ASE | NUN | 1BER | GROUP NUMBER |
|------------------------------|---|------------------|--------------------------------------|------------------------------------|---------------------|--------------------|------------------|---|
| EOR | NI / | \ELI | S-4 DERMATO | (0) (0) (0) (0) | (a) (a) (a) (a) (a) | (4) (4) (4) (4) (4 | \$ 6 7 \$ 6 7 | |
| | VI. V | | OR POSITIVE FINDING | S NOTE T | YPE | AND | LOCA | ATION ON ANATOMIC CHART CIRCLE BELOW |
| SKIN EXAM | WAS | S: | ONORMAL OAB | NORMAL (| REFL | JSED | | ANATOMICAL CHART USED? �� ௰ |
| YES | NO O | TYPE 1 | COMEDONES | | YES | NO O | TYPE 13 | ACTINIC KERATOSES |
| 0 | 0 | 2 | ACNEIFORM LESIONS | ; | 0 | 0 | 14 | PETECHIAE |
| 0 | 0 | 3 | ACNEIFORM SCARS | | 0 | 0 | 15 | ECCHYMOSES |
| 0 | 0 | 4 | DEPIGMENTATION | | 0 | 0 | 16 | CONJUNCTIVAL ABNORMALITY |
| 0 | 0 | 5 | INCLUSION CYSTS | | Ο, | 0 | 17 | ORAL MUCOSAL ABNORMALITY |
| 0 | 0 | 6 | CUTIS RHOMBOIDALI | S | 0 | 0 | 18 | FINGER NAIL ABNORMALITY |
| 0 | 0 | 7 | HYPERPIGMENTATION | j | 0 | 0 | 19 | TOE NAIL ABNORMALITY |
| 0 | 0 | . | JAUNDICE | | 0 | 0 | 20 | DERMATOGRAPHIA |
| 0 | 0 | 9 | SPIDER ANGIOMATA | | 0 | 0 | 21 | SUSPECTED BASAL CELL CARCINOMA |
| 0 | 0 | 10 | PALMAR ERYTHEMA | | 0 | 0 | 22 | SUSPECTED SQUAMOUS CELL CARCINOMA |
| 0 | 0 | 11 | SUSPECTED MELANO | MA | 0 | 0 | 23 | NEVUS |
| 0 | 0 | 12 | PALMAR KERATOSES | | 0 | 0 | 24 | VITILIGO |
| SKIN BI | OBCV | , | · | | 0 | 0 | 25 | OTHER ABNORMALITY(IES) |
| ○ BIOP | SY NO | OT IND DICATE | ICATED ED, IF SO ID LOCATION CODE(S) | BIOPSY BIOPSY REFERRE | PERF | ORME | | # SAMPLES ① ① ② ④ ⑤ ⑦ ⑧ ⑨ YES CONSENT FORM OBTAINED MENT(S)/SUSPECTED DIAGNOSIS |
| PHYSIC ହାଲାହାୟ | | | RES LORED OR TINTED CONT | ACTS? | | | | |
| | | EYE C | OLOR RIGHT | HA SOLID COL | | → GI | REYS | SKIN COLOR |
| H <i>i</i> Gf GF BL | ROWN AZEL REEN REY LUE BSENT | 0000 | O BR O BL O RE O BA | OWNS ® ® ONDS ® DS ® LD © | ® 29 ⊗ NO | 39 49 OT NE | € EEDED | ⊗①②③④⑤⑥⑦⑧⑨⑩⑫ ⑨®COMMENTS? |
| PRINTED I | NAME | OF EX | | AIR DYED OF | | ERED | ? | FORM QA AUDIT DONE BY: |
| | | | | , - | | (1 | | NUMBER <u>INITIALS</u> <u>DATE</u> 4 § 6 7 8 9 |

Printed in U.S.A.

Mark Reflex® by NCS MP89694:321C-21

| PARTICIPANT LABEL | CASE NUMBER | GROUP NUMBER | |
|-------------------|------------------|--|-----------|
| | 0023456789 | 0023496789 | (SIE) |
| | 0023456739 | 0023499789 | |
| | 0023496739 | EXAMINER I.D. | |
| | 0023496789 | 0000000000 | |
| , | 0023496789 | 0000000000000000000000000000000000000 | CAT ZEE. |
| | 0023496789 | 00000000000 | |
| EODIA AEUS O | ANATOMICAL CHART | • | YEAR 10 |
| FORM AFHS-9 | ANATOMICAL CHART | | FOLLOW UP |





| PART | ICIPANT | LABE | L | | I | | ASE NU | | | | | | NUMB | | (ABA) |
|--|--------------|----------------|------------------------|----------|----------------|-------------|----------------|-----------|------------------|-----------|---------------------|--------------|-------------|--------------|--|
| | | | | | <u> </u> | | <u> </u> | | | | | | | 000 | |
| | | | | | - | | 0000 | | | | | | INER I.I | 000 | |
| | | | | | - | | 0234 0234 |) (SE) | <i>୦</i> ୭ ଜନ | <u> </u> | | | |).)000 | A STATE OF THE STA |
| | | | | | \vdash | | 0236 | | | | | ງ ງ@(| 306 | 000 | المارة المارة |
| | | | | | - | | 0000 | | | | _ ŏ(|) (| 9000 | 000 | |
| FORM AF | HS-5 | NEL | JRO | LO | GIC | | | | | | | | | | YEAR 10 FOLLOW U |
| Section 11 Section | | | | | | | AD AND | | | 200 | | | | | TOLLOW 0 |
| INSPECTIO | | | ON | | | | K RANG | | | | 1 | 9 ® C | OMMENT | rs | |
| ONIODNANI | CNE YES | | /A 43 457 | TDV . | | | MAL | | REASE | | CNE | | | | |
| ONORMAL OABNORMAL | | _ | MMET PRESSIO | 1 | LEFT RIGH | | 00 | | 0 | | X X | | • | | |
| OADINOTIVIAL | | (N)SCA | | | | WARD | ŏ | | ŏ | | 8 | | | | |
| | | ®OTH | | | | KWARE | _ | | ŏ | | 8 | | | | |
| 1.1 | | | | | | | TOR SY | | | | | | | | |
| | | AIT | | | | | | | | ING M | | | | HAN | DEDNESS |
| ONORMAL | _ | _ | AD BA | | | | | • • | ORMA | _ | NORN | _ | CNE | - | |
| OABNORMAL | _ | _ | ALL ST | EPPED | , | | | LEF | | \circ | 0 | 0 | | OLEF | |
| OCOULD NOT EXAMINE | | N ATA N OTH | | | | | | RIG | н (| 0 | 0 | 0 | צ | ORIG OBOT | |
| ©COMMENTS | <u> </u> | WUIH | ien – | | | 7 | <u> </u> | | | | | | | _ UBU | , |
| , GOMMENTO | - | | | | | | • | | | | | | • | | |
| | | | | | | | | | | | | | | | |
| NAME OF THE OWNER OWNER OF THE OWNER OWNE | | O 4 5 1 | | | | | SCLE S | TATU: | | ODE 4 | | 10 | 0.000 | A ALLA LITTO | |
|)NORMAL I | | NORWA OABN | IORMA Al C n | | LEFT | PECRE/ | | н | EFT | CREAS | | лн С | (NCOM | INIEW 12 | |
| UPPER EXTREMITI | | 0 | (X | | 0 | 0 | | 1 1 | 0 | 0 | • . | | | | |
| LOWER EXTREMIT | | ŏ | Ø | | ŏ | ŏ | | | ŏ | ŏ | | 5 | | | |
| STRENGTI | н | _ | | | _ | _ | _ | | | | | | | | |
| DISTAL WRIST EX | | Õ | Ø | | Õ | Õ | Q | | | | | | | | |
| ANKLE/TOE FLEX | | Ŏ | 8 |) | Õ | Õ | Ŏ | | | | | | | | |
| PROXIMAL DELTO | IDS | 0 | 8 | | 0 | 0 | 0 | | | | | | | | |
| HIP FLEXORS | | U | Ø | <i>)</i> | O A: | SMORK | MAL MO | OVEM | ENTS | | | | | | |
| NTICS, CHOREA | AS FASICUI | LATION | IS | 02 | | | ® COMN | | | | | | | | |
| (N) TENDERNESS | | | | <u> </u> | <u> </u> | | | | | | | | | | |
| athorist of the parties | | XTRE | MITY | TRE | MOR | | MMENT | | | | | | ONOR | SPEE | OYSARTHRIA |
| | UPPER | | | WER | 100 | | IMIMICIAI | | | | | | OAPHA | | AGNOSIA |
| ī | | GHT | LEFT | RIGH | 1 T | | | | | | | | 1 - | R ABNOR | |
| NO TREMOR | 0 (| o | 0 | 0 |) | | | | | | | | | OMMENT | |
| RESTING | 0 | | 0 | 0 |) | | | | | | | | 1 | | |
| SSENTIAL | | Š | O | Õ |) | | | | | | | | 1 | | |
| NTENTION | | $ \geq $ | Õ | 0 | | | | | | | | | 1 | | |
| OTHER | 0 (| 0 | 0 | 0 | | CO | ORDIN <i>A</i> | TION | | | | | 1 | | |
| | | N | IORMAI | L | | | ORMAL | | | CNE | (Y) | O)COM | MENTS | | |
| 1 EQUILIBRATORY | (ROMBER | | 0 | | LEFT | | GHT | BOTI | ł | ⊗ | | ٠ - ١٠٠٠ | | | |
| FINGER-NOSE-F | | • | ŏ | | 0 | | 0 | 0 | | ® | | | | | |
| B HEEL-KNEE-SHI | | | 0 | | Ŏ | | Ŏ | Ō | | \otimes | | | | | |
| HAND PRONATI | | NOITAL | | | Õ | | Ŏ | O | | ⊗ | | | | | |
| RAPID PATTING | | | 0 | | 0 | - | O Nacii | 0 | VES | ⊗ | | | | | |
| (0 = ABSENT, 1 = SLUG | GISH 2 = ACT | VE 3=1 | VERY AC | TIVE 4 = | | | NDON | | | | |) (A) (A) | OMMENT | S | j |
| 12 - MDSCI41, 1 - SCOOL | | LEFT | MU | | CNE | | 30 | RIGH | | | CNE | .) . | CIVIIVICIVI | J | |
| SICEPS | ① ② | 3 | 4 | | ⊗ | 0 | ① ② | 3 | 4 | ⑤ | ⊗ | | | | |
| _ | ① ② | <u>③</u> | <u>@</u> | | \otimes | | | <u> </u> | <u>@</u> | (5) | $\check{\otimes}$ | | | | |
| PATELLAR (1) | 0 2 | 3 | ④ | ⑤ | ⊗ | 0 | ① ② | 3 | 4 | ⑤ | ⊗ ⊗ | | | | |
| ACHILLES | ① ② | 3 | ④ | ⑤ | ⊗ | o | ① ② | 3 | 4 | ⑤ | \otimes | | | | |
| BABINSKI OPR | RESENT | <u> </u> | BSENT | | <u> </u> | OPRE | ESENT | 0/ | ABSEN | 11 | ⊗ | | | | · |

Printed in U.S.A. Mark Reflex* by NCS MP89738:321

| CRANIAL NERVES AND MENTAL STATUS | | | | | | | |
|---|-------------------------------------|--|--|--|--|--|--|
| (X)= COULD NOT EXAMINE, (N)= NO; NO | NORMAL, Y= YES, NORMAL | | | | | | |
| | D TO LEFT SIDE | | | | | | |
| MENINGEAL IRRITATION AND SENSORY SYSTEM | | | | | | | |
| - ABNORMAL - (*) ®COMMENTS NORMAL LEFT RIGHT BOTH CNE | | | | | | | |
| | | | | | | | |
| STRAIGHT LEG RAISING O O O O O O | 6 | | | | | | |
| PIN PRICK O O O O | | | | | | | |
| LIGHT TOUCH O O O O PIN PRICK O O O O VIBRATION AT ANKLE (128 HZ) O O O O | | | | | | | |
| POSITION (GREAT TOE) O O O O | | | | | | | |
| CRANIAL NERVI | | | | | | | |
| | COMMENTS (I, VII) | | | | | | |
| ⊗ N Y ⊗ N Y SENSE OF SMELL PRESENT? | | | | | | | |
| ⊗⊗ ⊗⊗ ⊗⊗ SMILE NORMAL? ⊗⊗ PALPEBRAL FISSURE NORMAL? | | | | | | | |
| ⊗®♥ ⊗®♥ PALPEBRAL FISSURE NORMAL? CRANIAL NER | VES (II) | | | | | | |
| LEFT RIGHT | | | | | | | |
| ⊗®♥ ⊗®♥ FUNDOSCOPIC EXAM NORMAL? | | | | | | | |
| ⊗®♥ ⊗®♥ ABSENCE OF DISK PALLOR/ATROPHY? | | | | | | | |
| ⊗®♥ ⊗®♥ ABSENCE OF EXUDATE? | | | | | | | |
| ⊗® ⊗ ⊗® ⊗ ABSENCE OF PAPILLEDEMA? | | | | | | | |
| ⊗®♥ ⊗®♥ ABSENCE OF HEMORRHAGE? | /m N/ N/N | | | | | | |
| CRANIAL NERVES | (III, IV, VI) | | | | | | |
| LEFT RIGHT ⊗®♥ ⊗®♥ VISUAL FIELDS NORMAL TO CONFRON | 100 | | | | | | |
| → × N Y → PUPILS EQUAL SIZE? DIFFERENCE → | | | | | | | |
| ⊗® ⊗® PUPIL SHAPE/POSITION ROUND & NOR | | | | | | | |
| ⊗® ⊗® ⊗ UIGHT REACTION NORMAL? | ABNORMAL POSITIONS | | | | | | |
| ⊗⊗⊙ ⊗⊗⊙ EYE MOVEMENT NORMAL? | | | | | | | |
| ⊗ N Y ⊗ N Y HORIZONTAL NYSTAGMUS | | | | | | | |
| ⊗® ⊗® VERTICAL NYSTAGMUS | · | | | | | | |
| (XNY) (XNY) ROTARY NYSTAGMUS (XNY) (XNY) EYEBALL POSITION NORMAL? → | | | | | | | |
| 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |)- CONTACT LENSES | | | | | | |
| ⊗®♥ ⊗®♥ CORNEAL REFLEX NORMAL? | NOT REMOVED / | | | | | | |
| CRANIAL NERVES (\ | | | | | | | |
| LEFT RIGHT | | | | | | | |
| ⊗® ® ® ® ® ® ® ® ® ® | | | | | | | |
| | | | | | | | |
| (S) (N) (N) (N) (N) (N) (N) (N) (N) (N) (N | | | | | | | |
| ⊗® ®® PALATE REFLEX NORMAL? ©® ®© TONGUE PROTRUDES TO MIDDLE, NOT | DEVIATED? | | | | | | |
| (V) (N) (N) TONGUE NORMAL, NOT ATROPHIED? | | | | | | | |
| (NOT DEVIA | ED)? | | | | | | |
| | VIATED)? | | | | | | |
| ™ ® MENTAL STATUS GROSSLY ORIENTED & NORMAL? | | | | | | | |
| ™ ® COMMENTS | | | | | | | |
| | · | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| IMPRESSION OF ENTIRE NEUROLOGIC EXAM | FORM QA AUDIT DONE BY: | | | | | | |
| OCOMPLETELY NORMAL EXAM | ①②③④⑤⑥ <u>INITIALS</u> | | | | | | |
| ONORMAL WITH MINOR VARIATIONS NOTED | | | | | | | |
| OABNORMAL WITH NO FOLLOW-UP NEEDED | DATE: INITIALS: | | | | | | |
| OABNORMAL WITH FOLLOW-UP RECOMMENDED | DAIL. INTINGO. | | | | | | |
| | PRINTED NAME OF EXAMINING PHYSICIAN | | | | | | |
| | | | | | | | |

| PARTICIPANT LABEL | CASE NUMBER | GROUP NUMBER |
|-----------------------|-------------|---------------|
| | 0023456789 | 0023436789 |
| | 002303099 | 0023436789 |
| | 0023030000 | EXAMINER I.D. |
| | 0023090739 | 0023456739 |
| ertar v _{er} | 002309009 | 0023060700 |
| | 0023090789 | 002306006 |

FORM AFHS-8

VIETNAM COMBAT INDEX

YEAR 10 FOLLOW-UP

VERSION 1.0 JRW:SCF 585

INSTRUCTIONS

INSTRUCTIONS ARE INCLUDED WITH EACH QUESTION. BELOW IS AN EXAMPLE OF THE CORRECT WAY TO ANSWER EACH QUESTION.

EXAMPLE: DO YOU PLAN TO DO ANY OF THE FOLLOWING NEXT WEEK? (PLEASE BLACKEN EITHER "YES" OR "NO")

YES NO

● W VISIT A RELATIVE

Y ■ GO TO A MUSEUM

● ® GO TO A MOVIE

(I WILL VISIT A RELATIVE AND GO TO A MOVIE NEXT

WEEK)

AIRCRAFT

PLEASE INDICATE WHETHER YOU SERVED OR FLEW IN ANY OF THE FOLLOWING AIRCRAFT WHILE IN VIETNAM: (DO NOT INCLUDE TRANSPORTATION TO OR FROM VIETNAM)

| | YES NO | YES NO | YES NO |
|-----------------|---------------|------------------|----------------------------|
| WERE YOU EVER A | | ⊕ ⊕ C-7 | ② ② C−130 (GUNSHIP) |
| CREW MEMBER? | | Ŷ (C-54 | (Y) (M) HELICOPTER GUNSHIP |
| | | Ŷ ®C-118 | ▼®OTHER AIRCRAFT |
| YES NO | № 8–52 | Ŷ ® C−123 | SPECIFY + |
| 3 3 , | Ö Ñ8-66 | ® C-130 | |

EXPERIENCES

BELOW IS A LIST OF DIFFERENT COMBAT ROLES AND FLYING EXPERIENCES THAT AIR FORCE PERSONNEL HAD DURING THE VIETNAM WAR. FOR EACH STATEMENT, PLEASE BLACKEN THE "YES" CIRCLE IF YOU HAD THAT EXPERIENCE DURING THE VIETNAM WAR OR THE "NO" CIRCLE IF YOU DID NOT. PLEASE BLACKEN EITHER "YES" OR "NO" FOR EACH EXPERIENCE.

YES NO

- **™** RECEIVED COMBAT PAY
- ** (*) CRASH LANDED, BAILED OUT, OR SHOT DOWN
- MOVED KILLED OR WOUNDED PERSONNEL
- (FAC) SERVED AS A FORWARD AIR CONTROLLER (FAC)
- PLEW IN THE SAME AIRCRAFT WHEN FELLOW CREWMEMBER WAS WOUNDED OR KILLED
- THE SAME SORTIE WHEN A FELLOW
 CREWMEMBER WAS WOUNDED OR KILLED

YES NO

- THAT RECEIVED BATTLE DAMAGE
- **RECEIVED INCOMING ARTILLERY OR ROCKET FIRE AT HOME BASE OR CAMP
- **⑨** ENCOUNTERED MINES OR BOOBY TRAPS
- ★ MILLED VC OR NVA IN STRAFING OR BOMBING RUNS
- **(M)** WOUNDED
- **MHAD A CLOSE FRIEND KILLED IN ACTION**
- **Y** ENGAGED VC OR NVA IN A FIREFIGHT
- (Y) CAPTURED BY THE ENEMY

| PARTICIPANT LABEL | CASE NUMBER | GROUP NU | JMBER | | | |
|--|---|---|---------------------|--|--|--|
| | 00234567 | 00000 | 00000 | | | |
| | 00000000 | | 000000 2 2 | | | |
| | 00000000 | | | | | |
| | 000000000000000000000000000000000000000 | | 00000 | | | |
| | | | 00000 | | | |
| | 00234960 00234560 | | 000000 | | | |
| DIM ASUS 10 ELECTRA | | • | YEAR 10 | | | |
| ORM AFHS-10 ELECTRO | DCARDIOGRAM RI | EPUKI | FOLLOW-UP | | | |
| ECG EXAM WAS/IS: | ONORMAL | OABNORMAL | OREFUSED | | | |
| FOLLOW-UP RECOMMENDED? | ONO | OYES | | | | |
| PARTICIPANT COMPLY WITH 4 HOUR ABSTINENCE | OYES | ONO | | | | |
| TECHNICALLY | OSATISFACTORY | OUNSATISFACTORY | | | | |
| RHYTHM: NORMAL SINUS | OYES | ONO | • | | | |
| | RATE | | | | | |
| TACHYCARDIA BRADYCARDIA | INTERVALS | | | | | |
| >100 <50 | | | | | | |
| ×100 <30 | PR | ONORMAL | OPROLONGED | | | |
| | QRS | ONORMAL | OPROLONGED | | | |
| | QT | ONORMAL | OPROLONGED | | | |
| $\begin{array}{ccc} \hline 0 \overline{0} \overline{0} \\ \hline 0 \overline{0} \overline{0} \\ \end{array}$ | AXIS: | ONORMAL | ORIGHT OLEFT | | | |
| 22 | | | | | | |
| 333 444 44 | MORPHOLOGY | | | | | |
| 666 66 | P-WAVE: | ONORMAL | OABNORMAL | | | |
| 666 66 | QRS | ONORMAL | OABNORMAL | | | |
| 000 00 | | ORBBB | OLBBB | | | |
| <u> </u> | ST-T | ONORMAL | OABNORMAL | | | |
| | Q-WAVE | ONORMAL | OABNORMAL | | | |
| | U-WAVE | OPRESENT | OABSENT | | | |
| CHANGED ENLADOFMENT | ADDI IVITI IN MAD | | | | | |
| CHAMBER ENLARGEMENT | 1 | Yes | @ @ | | | |
| RIGHT ATRIAL (Y) (N) | 1 1 | | ♥ ® | | | |
| | NOTE O | | | | | |
| LEFT ATRIAL | · · · · · · · · · · · · · · · · · · · | L FLUTTER | | | | |
| RIGHT VENTRIC | | OATRIAL FIBRILLATION OJUNCTIONAL RHYTHM | | | | |
| LEFT VENTRIC | 1 - | | | | | |
| DDIOD INITA DOTTON | | FOCAL ATRIAL RHYTHM | 02405 | | | |
| PRIOR INFARCTION 🕜 🔞 | OMULTI | | OPACS | | | |
| MICEDIOD O | OUNIFO | • | OPACS | | | |
| - INFERIOR O | OOTHER | | | | | |
| - ANTEROSEPTAL O - ANTERIOR O - LATERAL O | - A-V NODAL | ⊙ ® | | | | |
| - ANTERIOR O | 1st° A-V | | | | | |
| - LATERAL O | 2nd° A-V | <u> </u> | | | | |
| OTHER CHANGES TO THE | 3rd° A-V | BLOCK O | | | | |
| OTHER OLOW ORS VOLTAGE | | A | ^ | | | |
| OANEURYSM OINI OEARLY REPOLARIZATION | FERIOR OANTERIOR | OANTEROSEPTAL | OLATERAL | | | |
| OPRE EXCITATION | OWPW OLGL | . OOTHER | | | | |
| COMMENTS | | TECHNICIA | ANS ID# INITIALS | | | |
| | | 0000 | 66 | | | |
| PRINTED NAME OF CARDIOLOGIST | ID# INI | TIALS FORM | I QA AUDIT DONE BY: | | | |
| | | ID4 | * INITIALS | | | |
| | | 0230 | 56 | | | |
| | | | | | | |
| in U.S.A. Mark Hetlex® by NCS MP89735:321 | c-27 | | | | | |

| | | | | | OUD MUMBER | |
|--------------------|--------------------------|-----------------|--------------|--|--|-----------------|
| PARTICIPANT | | | UMBER | | 0UP NUMBER 000000000000000000000000000000000000 | |
| | | | 00000 | | 0234990 | |
| | | | 00000 | | XAMINER I.D. | |
| • | <u> </u> @ | 000 | 00000 | |)234567 | |
| | | | 00000 | | | |
| | <u> </u> | 000 | 49999 | |)@@@@@@ } | |
| | | | 4667 | | 0234667 | YEAR 10 |
| FORM AFHS-11 | RADIOLOGY | EXA | MINATI | ON | | FOLLOW-UP |
| | | | | | | 1 OLLOW-OI |
| CHEST X-RAY EXAM W | AS: ONORMAL, NO FINDINGS | ONORM FINDIN | |)ABNORMAL | ONEED PRIOR FILMS(S) | OREFUSED |
| FILM QUALITY IS: | OGOOD OFAIR | ORE | PEAT | OWAS REPE | ATED | |
| FOLLOW-UP NEEDED: | OYES ONO | | | |) ON | |
| COMMENTS/RECOMME | ENDATIONS: | | | | | |
| | | • | | RIGHT | ANTERIOR | LEFT |
| NORMAL | ABNORMAL | (PLE | ASE NOTE TI | HE LOCATIONS | IN ABOVE DIAGR | AM) |
| Y NLUNGS | ® GRANULOMATOUS CHA | NGES | ı ® | (LESION/NO | DULE/DENSITY | |
| | OOLD OSUSPECT | | | OBENIGN | OSUSPECT | OCALCIFIED |
| | ® (LINFILTRATE | | | (INTERSTITION | AL MARKINGS | |
| | OACUTE OCHRON | VIC | _ @ | OTHER: | → | |
| | ® OHYPERINFLATION | | | | | |
| | OCOPD OOTHER | | ! | | | |
| WARTERIAL | ODILATED/TORTUOUS AC | _ | | LCIFICATIONS | OASC OD | ESC OARCH |
| VASCULATURE | | OARCH | Ooī | THER: | | |
| | OAORTIC ANEURYSM | _ | _ | | | |
| | <u> </u> | OARCH | | | DESC OARCH | |
| ® VENOUS | OA-V MALFORMATION | | | OOTHER - | → | |
| VASCULATURE | OPULMONARY VENOUS (| CONGEST | | | | |
| NDIAPHRAGMS | OELEVATED | | OOTHER | ★ | | |
| | OHIATAL HERNIA | | DIELES | NODAAA | | ⊘ ® LEFT |
| HEART NORMAL ① | - | | 1 | NORMAL | | Willer |
| CHAMBER 🕈 | ® CATRIAL | | G. | NTHICKENED (() () () () () () () () () () () () () | | |
| | ® © VENTRICULAR | | | ® CBASE | | |
| | ® ©OTHER → | | 1 | ® COTHE | | 1 |
| | | | | (COTHE | n - / | |
| BONEY STRUCTURES | NORMAL ❤️ (| N | RIB ABN | ORMALITY | OCERVICAL OHYPOPLASTIC | |
| PRIOR FRACTURES: | - | SPINE RIBS | POST SU | RGICAL CHAN | OFUSED IGES | |
| DEGENERATIVE CHANG | | | | OPRIOR THO | RACTOMY DIAC SURGERY | |
| SPINAL CURVATURE: | OSCOLIOSIS | | | OPACEMAKE | | |
| SCHAL CURVATURE: | OKYPHOSIS | | | OOTHER: — | | |
| | OK 11 (103)3 | | | J3111211. | - | |
| DATE OF EXAM | | X- | RAY TECHNIC | IAN: ID# | 023456 023456 | INITIALS |
| | | | | | | |

| | ABDOMINAL | EVALUATION | | | | | |
|--|--|---|---|--|--|--|--|
| TECHNICALLY SATISFACTORY? ABNORMALITIES: MASSES ABNORMAL CALCIFICATIONS ABNORMAL BOWEL GAS PATTERN ABNORMAL BONEY STRUCTURES OTHER (USE COMMENT AREA AT RIGHT FOLLOW-UP NEEDED? | ® 0000 | MMENTS/RECOMMEN | TECHNICIAN ID # INITIALS 123456 123456 | | | | |
| TESTICULAR ULTRASOUND STUDY | | | | | | | |
| RIGHT TESTICLE | | 1 | LEFT TESTICLE | | | | |
| PRESENT () ABSENT () RE | FUSED () | PRESENT () | ABSENT O REFUSED O | | | | |
| LENGTH Cm | AP DIAMETER Cm | LENGTH - cm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | MIDTH DIAMETER • cm • cm 0 0 0 1 1 0 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 | | | | |
| VOLUME VOLUME: 0 0 0 0 NORMAL NORMAL 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | ⊙ ® | VOLUME | VOLUME: NORMAL O ABNORMAL O (IF VOLUME ABNORMAL:) VOLUME ENLARGED Y N VOLUME DECREASED Y N | | | | |
| OTHER FINDINGS (*) (*) MASS CYST OTHER NEEDS FURTHER WORK-UP | SIGNIFICANT: (Y) (N) (Y) (N) (Y) (N) (Y) (N) | OTHER FINDINGS MASS CYST OTHER NEEDS FURTHE TECHNICIAN ①②③④⑤⑥ | () () () () () () () () () () | | | | |
| ⊙ ® COMMENTS: | | | | | | | |
| PRINTED NAME OF RADIOLOGIST | ID# | INITIALS | FORM QA AUDIT DONE BY: ①②③④⑤⑥ INITIALS | | | | |

| | | 0.05.11111055 | | GROUP NUMBER | | | | | |
|--|---|--|---|---------------------------------------|--|--|--|--|--|
| PARTICIPAN | I LABEL | 000306 | | 0023456789 | A TOTAL OF | | | | |
| | | 0000000 | 000 | -000000000000000000000000000000000000 | | | | | |
| | | 0023096 | 0000 | EXAMINER I.D. | | | | | |
| | | 0000000 | 700 | 0023450789 | Was a state of | | | | |
| | | 0000000 | | -000000000000000000000000000000000000 | | | | | |
| | | 0000000 | | -000000000000000000000000000000000000 | | | | | |
| F0011 45110 40 4 | 01/11/1 TE 05 | | | | YEAR 10 | | | | |
| | FORM AFHS-12 SKIN TEST FOR DELAYED CUTANEOUS HYPERSENSITIVITY FOLLOW-UP | | | | | | | | |
| | | | | | | | | | |
| SPECIFY NON-COMPLIANCE AND/OR MEDICATION(S), DOSAGE(S) & FUNCTION(S) BELOW: | | | | | | | | | |
| | | | | · | | | | | |
| | | | | | | | | | |
| AN | TIGENS TES | TED - 48 HR READINGS - GF | EATEST IN | IDURATION IN MM | | | | | |
| ANTIGEN ADMINIS | | MUMPS | -CILVI IIV | CANDIDA ALBICANS | | | | | |
| MILITARY DATE | INITIALS | | | (1:1000 w/v) (0.1 ml) | - | | | | |
| 71005 | YR IIIIII | | | | - | | | | |
| | | COMMENTS: | | COMMENTS: | | | | | |
| | 0 | | 000 | | 000 | | | | |
| 0000 0000 | <u>0</u> | | 000 | | 000 - | | | | |
| 0000 000 | ② ID * | | 222 | | 222 | | | | |
| 000 000 | ③ <u> </u> | | 333 | | 333 - | | | | |
| 000 0 0 | 0 00 | • | @@@ | | <u> </u> | | | | |
| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 9 00 | | 666 | | <u> </u> | | | | |
| 6 6 6 | 6 22 | | 666 | | 000 | | | | |
| 6 6 6 7 7 8 8 8 8 | 0 00 | | 000 | | 000 | | | | |
| 8 8 8 8 | 0 00 | | 000 | | 000 | | | | |
| 0000 0000 0000 0000 0000 000 0000 0000 0000 000 0000 0000 0000 000 0000 0000 0000 000 0000 0000 0000 000 0000 0000 0000 000 0000 0000 0000 000 0000 000 00000 000 0000 000 0000 000 0000 000 0000 000 0000 000 0000 00 | 0 00 | OTA DILI DILA OF INCATE (C.C. | <u> </u> | DEAD # 000 | 999 | | | | |
| TRICHOPHYTON | ŀ | STAPH-PHAGE-LYSATE (0.05 m | | READ # ①②③ MILITARY DATE | INITIALS: | | | | |
| (1:1000 w/v) (0.1 ml) | | (STAPH = $6.0 \text{ TO } 9 \text{ X } 10^6 \text{ CPU}$) (PHAGE = $0.5 \text{ TO } 5 \text{ X } 10^7 \text{ PFU}$) | | TIME MO DAY Y | | | | | |
| COMMENTS: | | (FINGE - U.S TO S X TO PPU) | | | | | | | |
| COMMICIA 19: | 000 | COMMENTS: | 000 | | <u> </u> | | | | |
| | 000 | | 000 | 0000 0000 | Ō | | | | |
| | 000 | | 202 | 0000 000 | ① ID# I | | | | |
| | 333 | · | 333 | 333 339 | ③ ∐∐ ■ | | | | |
| | 000 | • | @@@ | 000 0 0 | 0 00 - | | | | |
| | 666 | | ⑤⑤ ⑤ | 666 6 6 | ⑤ (00) - | | | | |
| | 666 | | 666 | | @ @@ - | | | | |
| | 000 | | 000 | | ଡ଼ା <u>ଡ</u> ଼ୁଡା | | | | |
| | 888 | | 888 | | ® @ @ | | | | |
| | 999 | | <u> </u> | | <u> </u> | | | | |
| | <u> </u> | INTERPRETATION | N | | | | | | |
| ONOT TESTED | _ | ERPRETABLE OREFUSED | ATION ON ("** | | | | | | |
| OPOSSIBLY ABNORMAL | (ALL <5 mm l |) • • • • • • • • • • • • • • • • • • • | AHUN GIVEN | PARTICIPANT! | | | | | |
| OFOLLOW-UP NEEDED | TABLECTIC ! !! | DEDCENICITIVITY /~TECT ~E | 1 | | | | | | |
| Ξ | IANEUUS HYF | PERSENSITIVITY (≥TEST ≥5 mm l | 17 | | | | | | |
| OOTHER OCOMMENTS/RECOMM | MENDATIONS: | | | · | | | | | |
| OCCIVILATED LIFECOINIA | | | | | - | | | | |
| | | | | | = | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | - | | | | |
| | | | | | - | | | | |
| | | | | | = | | | | |
| | | | | CORE OF AUDIT OF | /· | | | | |
| PRINTED NAME OF AL | LERGIST | ID# INITIALS | DATE | FORM QA AUDIT BY | 1 | | | | |
| | | | | 123456 INITIALS | DATE | | | | |
| | | | | • | | | | | |
| | | 1 | 1 | | 1- | | | | |

**

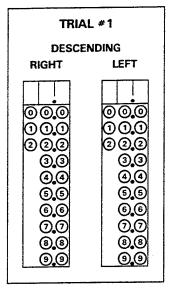
| | | | • |
|--|----------|--|--|
| PARTICIPANT LABEL FORM AFHS - 1-1 | VASO | CASE NUMBER 0 0 2 3 6 6 0 8 9 0 0 2 3 6 6 0 8 9 0 0 2 3 6 6 0 8 9 0 0 2 3 6 6 0 8 9 0 0 2 3 6 6 0 8 9 0 0 2 3 6 6 0 8 9 CULAR LABORATORY - De | GROUP NUMBER 0 0 2 3 0 3 0 7 0 9 0 0 2 3 0 6 0 7 0 9 DIAGNOSTICIAN ID NO. 0 0 2 3 0 6 0 7 0 9 0 0 2 3 0 6 0 7 0 9 0 0 2 3 0 6 0 7 0 9 OPPLER YEAR 10 FOLLOW UP |
| yes no ③ ③ Are films attached? ③ O Did participant comp | | any? 4 hour abstinence requirement? | |
| | | Right | Left |
| Radial | cne ③ | © O © © | cne |
| Femoral | cne ⊗ | 0023 | cne ② |
| Popliteal | cne ② | 0 1 2 3 | cne ② |
| Dorsalis Pedis | cne ⊗ | 0 1 2 3 | cne ② 00000 |
| Posterior Tibial | cne ② | 0000 | cne ② 0 0 2 3 |
| Follow-up: | | | |
| O Participant refused | | | |
| PRINTED NAME OF R.V.T. | ID# | INITIALS TECHNICIA | N FORM QA AUDIT DONE BY: |
| | | 023000 | 000000 |

| PARTICIPANT LABEL | CASE NUMBER | GROUP NUMBER |
|-------------------|---|---------------|
| 17(11)0117(11) | 0023496789 | 0023456789 |
| | 0000000000 | |
| | 000000000 | EXAMINER I.D. |
| | 000000000000000000000000000000000000000 | 0023466789 |
| | 0000000000 | 0023496789 |
| | | <u></u> |



FORM AFHS - 15 VIBROTACTILE THRESHOLD MEASUREMENT

YEAR 10 FOLLOW-UP

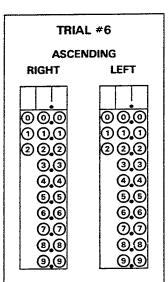


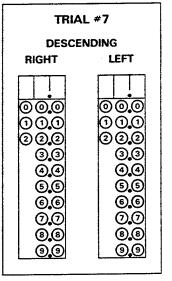
| TRIAL #2 | | | | | | |
|---|--|--|--|--|--|--|
| ASCEND | ING | | | | | |
| RIGHT | LEFT | | | | | |
| 000 000 000 000 000 000 000 | 000 000 000 000 000 000 000 000 | | | | | |

| TRIAL #3 | | | | | |
|---|--|--|--|--|--|
| DESCE | NDING | | | | |
| RIGHT LEFT | | | | | |
| 00.0 00.0 20.0 3.0 0.0 0.0 0.0 0.0 | 00.0 00.0 0.0 0.0 0.0 0.0 0.0 0.0 | | | | |

| TRIAL | _ #4 |
|---|---|
| ASCEN | DING |
| RIGHT | LEFT |
| 00.0 00.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 000 010 020 030 040 05 05 05 05 05 05 05 05 05 05 05 05 05 |

| TRIA | L #5 |
|---|---|
| DESCE | NDING |
| RIGHT | LEFT |
| 00.0 00.0 00.0 0.0 0.0 0.0 0.0 0.0 | 000 000 000 000 000 000 000 000 000 |





OREFUSED

OCOULD NOT EXAMINE

OCOMMENT?

EXAMINER NAME

ID#

INITIALS

QA AUDIT BY: INITIALS

023456

| QA AUDIT DO ID# INITIALS DATE | NE BY: | P | ARTICIPANT | | FICATION | - | THE STUDY |
|-------------------------------|------------------|--------------------|--------------|-----------------------------|---------------|---------------------------------------|----------------------|
| FORM AFH | S - 16A | DIA | GNOSTIC SU | JMMARY | (MEDICAL | _) | YEAR 10 FOLLOW UP |
| ICD-9-CM CODE | PRE- EXISTING | NEWLY DIAGNOSED | DIAGNOSIS BA | SED ON PHYS X-RAYs; SKIN | ICAL EXAMS; E | CG; HEMOCCULT ABORATORY STU | CHEST, KUB, DIES |
| | EXISTING | DIAGNOSED | | | | | |
| | | | | | | | |
| | - | | | · | | • | |
| | | | | | | | |
| | | | | | | | |
| | | | , | | | | |
| | | | | | | · · · · · · · · · · · · · · · · · · · | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| ** | AUDIOME | TRY | | | | F | |
| · | SPIROME | TRY | <u> </u> | | | | |
| | VISION S | CREEN | | | | | |
| <u> </u> | TONOME | | | <u></u> | | | |
| HEALTH I | | SUGGESTK | ONS: | WEIGHT [|] SMOKING | | COHOL |
| COMMENTS: | | | | FOLLOW-UI | NEEDED: | , | S GIVEN TO PATIENT: |
| | | | | 1. | | 1. | |
| | | | | 2. | | 2. | |
| | | | | | | | |
| | | | | 3. | | 3. | |
| | | | | | | | |
| | | | | 4. | | 4. | |
| | | | | | | | |
| | | | | | | EN REVIEWED WIT | H ME. |
| PARTICIPANT SI | IGNATURE _ | | | | | [| DATE |
| DIAGNOSTICIAN | ! | | | C-33 | D# INI | TIALS | DATE |

| DATE OF DIAGNOSIS | | DAY | YR |
|----------------------|----|-----|----|
| OUTBRIEFIN | IG | YES | NO |

PARTICIPANT

IDENTIFICATION



FORM AFHS - 16B

DIAGNOSTIC SUMMARY (PSYCHOMETRIC)

| | - CHEC | K ONE | | | | | |
|------------------|--|--------------------|-----------|-----------|-------------|---------------------------------|-----------------|
| ICD-9-CM CODE | PRE- EXISTING | NEWLY DIAGNOSED | DIAGNOSIS | BASED C | N PSYCHOLOG | GICAL TESTING: MILLO | N, SCLR90 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| • | | | | | | | |
| | | | | | | | |
| | | | | · · · · · | | | <u> </u> |
| COMMENTS: | <u>. </u> | | | | | | · |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | • | | | | | • | |
| | | | | | | | |
| | | | | | | | |
| PRINTED NAM | OF DIAGNO | STICIAN | ID# IN | IITIALS | DATE | FORM QA AUDIT D ID# INITIALS | ONE BY: DATE |
| | | | | | | | |

| <u> </u> | P | ARTICIF | PANT L | ABEL | | | CAS | SE N | JMBE | ₹ | (| GROUP | NUMBE | R | | |
|-----------------|-------------|-------------|----------|----------------|-------------|------------------|-------------|--------------|------------|-------------------------|--------------|-----------------|--------------|---------------|-----------------|---------------|
| | | | | | | | | | | 000 | | 0003 | | | | 37-3 |
| | | | | | | | | | | 000 | | 000 | | | | 三 : 昌 |
| | | - ' | | | | <u> </u> | 000 | 2)(3)(| 4)(5)(6) | 000 | | | INER ID | | 1 | |
| | | | | | | | 000 | 2) (3) (3) | 900 | 7000 | | 000 | 0000 0000 | | 1 | AFELY. |
| | | | | | | | 100 C | 2000 2000 | 900 900 | 789 789 | | 0.000 | | 7000 1000 | S | |
| | 504 | AJERI | 2.00 | ALID | 101.6 | | | | | 74.54 | 1.5.6.1 | | | | | R 10 |
| FC | KIVI | AFHS | 5-20 | AUD | IOLU | GY | | | | | | 1000 | | | FOLLO | W UP |
| | | | | | _ | | | | | | | | | | | |
| Αl | DION | IETER: | M | AICO 4 | Ю | ANSI | 1969 | € | 888 | = NO F | RESPO | NSE | 999 | = NOT | TES | TED |
| | | | | | PH | RE TO | NE A | IDIO | METR | Y RESU | ITS | | . January | دخینه محرار د | Section 2 | |
| | | | | | . 0 | | | | N HEF | | <u> </u> | | | | | |
| | | | LEFT | EAR | | | | | | | | RIGHT | EAR | | | |
| 250 | 500 | 1000 | 2000 | 3000 | 4000 | 6000 | 8000 | HZ | 250 | 500 | 1000 | 2000 | 3000 | 4000 | 6000 | 8000 |
| | | | | | | | | DB | | | | | | | | |
| <u> </u> | 000 | 000 | 000 | 000 | 000 | 00 | 00 | | 00 | 000 | 000 | 000 | 000 | 000 | 00 | 00 |
| စ္တမ | 000 | 000 00 | 00 | 00 | | | | | 0 | 000 00 | 00 | 00 | 00 | 000 | 0 | 00 |
| 00000 000000 | 0 | 0 | @ | (O) | (O) | 0000 | ① ② | | ② | 0 | 0 0 | 1 0 | © | 0 | @ | @ |
| <u>ි</u> | 3 | 3 | 3 | 3 | 3 | <u>a</u> | ② ③ | | 3 | 3 | <u> </u> | 3 | 3 | 3 | <u> </u> | 3 |
| ŏ l | @ | (| 4 | @ | <u> </u> | $\check{\Theta}$ | ④ | | <u>ĕ</u> | <u> </u> | <u>@</u> | <u> </u> | Ø | <u> </u> | ② ③ ④ | (4) |
| <u></u> | <u></u> ⑤ ⑤ | | | | <u></u> § § | 6 0 | <u></u> (5) | | <u></u> 66 | ⑤ ⑤ | <u></u> ⑤ ⑤ | | | | 6 0 | <u></u> ⑤ ⑥ |
| ဗော၊ | 6 | 6 | 6 | 6 | 6 | 0 | 6 | | 6 | 6 | 6 | 6 | ⑥ | 6 | © | 6 |
| シ ー | 0 | 0 | 0 | 0 | ② | | ② | | 0 | 0 | ② | Ø | 0 | 0 | 0 | 0 |
| 30 | @@@ | 888 | @@@ | 000 | @@@ | @@ | 88 | | 88 | @@@ | 000 | 000 | 000 | 000 | 88 | 88 |
| 99 | 999 | 999 | 999 | 999 | 999 | 99 | 99 | | 99 | 999 | 999 | 999 | 999 | 999 | 99 | 99 |
| | RELL | ABILITY: | | HE | ARING A | פון מו | E. | | TINNIT | IIC. | MM CC | MMENT | 52 | | • | |
|) GO | | ADILITI. | | ONONE | | ID 03 | L . | NON | | ©®® | | MANAICIAI | 5 ! | | | |
|) FAI | | | | OLEFT I | | | | MILD | | | | | | | | 1 |
| _ | ESTION | ABLE | | ORIGHT | | | | | | $\overline{\mathbb{O}}$ | | | | | | l |
| REF | FUSED T | EST | | Овотн | EARS | | | SEVE | | Ū ® ® | | | | | | 1 |
| | | | | ` | | | INTER | RPRE | TATIO | N | | | | | | |
| | | | | | | | | | | | | | | | | |
| - | HEARIN | | | | LOW FI | | | | | IID FREQ | | | HIGH | FREQU | ENCIES | _ |
| • | ABILIT | Y | | | (250 H | | | | (10 | 00 HZ to | | iZ) | • | HZ to 8 | | ²⁾ |
| 1 | NORMAL | LOSS | (0-25 E |)b) | AS O | (| AD O | | | AS O | AD O | | | AS O | AD O |] |
| | VILD | | (30-40 | | Ö | (| Ŏ | | | Ŏ | Ŏ | | | | | - 1 |
| | MODERA | TE LOSS | (45-60 | Db) | 0 | . (| 0000 | | | 0 | 0000 | | | 0 : | 0000 | |
| | SEVERE | | (65–85 | • | Q | (| Q | | | Q | 0 | | | 0 | Q | 1 |
| | | ND LOSS | | 0+ Db) | Q | | | | | Q | | | | | | |
| (| COULD N | NOT EXA | MINE | | ⊗ LEF | r Ri | ⊗ GHT | | | ⊗ LEFT | ⊗ RIGHT | | | ⊗ .EFT R | ⊗ IGHT | . |
| | | | | | | | |) REC | ONANA | ENDATI | | · · · · · · · · | | , | | |
|) NO | RMAL H | EARING I | BILATERA | ALLY | SUM | MATERIAL STATE | - AIVL | | | ENDAIL | ONO | | | | | |
| | | L FINDING | | | | | | YES ③ | | DITIONAL | L TESTS | RECOM | MENDED | ? | | |
| - | USED E | | | | | | | ŏ | | NSIDER H | | | | | D/OR T | RIAL? |
| | | | | | | | | | | | | | <u> </u> | | | |
| Ƴ ® । | RECOMN | MENDATION | ONS OR | other c | OMMEN | TS? | | | | | | | | | | - |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| PRINT | TED NAN | ME OF AU | DIOLOGIS | ST ST | | | INITI | ALS: | | DATE | : | FORM | OA AIII | DIT DON | E BY: | |
| | | | | | | | - | | | | - | 023 | | | 1 • | |
| | | | | | | | | | | | | | IALS: | DA | TF. | 1 |
| | | | | | | | | | | | | 11411 | inlu. | DA | · L . | |
| | | | | | | | | | | | 1 | | | | | |

| PARTICIPANT LABEL | | E NUMBER | | GROUP N | | (NE) |
|--|------------------------|---|------------------------------|---|--|--|
| | <u> </u> | 030000 | | | 999999 | |
| | | 00000 | | EXAMIN | <u> </u> | |
| • | @00 | 034967 034967 | 89 89 | | <u> </u> | A STATE OF THE STA |
| | 000 | 030000 | 89 | 00000 | 466789 | |
| | 002 | <u> </u> | 89 | | <u> </u> | N= 0 = 00 |
| FORM AFHS-21 TITMUS \ | /ISION S | SCREEN | & TON | IOMET | RY | YEAR 10 FOLLOW UP |
| | | | | | | |
| | FAR VISION | TESTS (20 F | EET) | | | |
| | | | | | | |
| ONORMAL TARGET: 1 | 2 3 | 4 5 6 | 7 8 | 9 10 | 11 12 13 | NUII |
| ABNORMAL SNELLEN 20 EQUIVALENTS 200 | 20 <u>20</u> 100 70 | <u>20</u> <u>20</u> <u>20</u> <u>35</u> | 20 <u>20</u> 30 <u>25</u> | 20 20 22 20 | 20 20 20 18 17 15 | 20 TESTED |
| LEFT CORRECTED CORRECTED | 20 20 100 70 0 0 | 20 20 35 0 0 0 0 | 200000 | 2020000 | 20 20 20 15 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | $-$ O \otimes $+$ |
| RIGHT CORRECTED O | 000 | 0 0 0 | o o | O O | 0 0 0 | ⊗ ⊗ ⊗ ⊗ ⊗ |
| RIGHT CORRECTED O LEFT UNCORRECTED O RIGHT UNCORRECTED | 00 | | 0.0 | 000 | | |
| RIGHT UNCORRECTEDO | 0 0 | 0 0 0 | 0 0 | 0.0 | 0 0 0 | |
| | STEREO DEI | PTH PERCEPT | rion | • | | |
| 0 | | | _ , | . <u>.</u> | - 0 | |
| ONORMAL STEREO DEPTH OABNORMAL (SHEPARD-FRY %) 1 | 1 2 | 3 4 50% 60% | 5 ⁻ 70% | • | 7 8 5% 90% ! | 9 NOT |
| (01.617.112.111.12.111.111.111.111.111.111.11 | 5% 30 % | 50% 60% | Ö. | | | Ö S |
| | | ID A DD 1CHIH | ADA DI A | TEC) | | |
| COLOR VI | SIUN (SIAN | DARD ISHIH | ANA FLA | 123) | | |
| ONORMAL (4-6 CORRECT) | , , | С | D E | F | | |
| OPARTIALLY COLOR BLIND | A B | | 6 16 | | NOT TESTED | |
| OCOLOR BLIND (ONLY 1 CORRECT) | 12 5 O O | 26 | 0 | 0 | ⊗ | |
| | | | | | | |
| | VERTICAL | STEREO FOC | US | | | |
| HYPERPHORIA? | | | | | | į |
| NONE LEFT RT BOTH CNE PRISM | 1 2 | 3 | 4 5 1/ | 6 | 7 NOT | l |
| O O O O ® DIOPTERS: | 1½ 1 O O | ¹ / ₂ O (| * Ö | . 0 | 1½ TESTED ⊗ | |
| | | STEREO FOC | | | | : |
| = = = | OPHORIA | | | | | PHORIA |
|)ESOPHORIA PRISM 1)EXOPHORIA DIOPTERS: 7 | 2 3 4 | 5 6 | = | | 11 12 13 | 14 15 6 7 TESTED |
| Ó | င်္ဂီဝိ | | | | 3 4 5 | <u>Ö Ó 🖁</u> |
| NE NE | AR VISION | TESTS (14 IN | ICHES) | | | |
| 0 | | | | | | |
| ONORMAL TARGET: 1 OABNORMAL | 2 3 | 4 5 6 | 7 8 | 9 10 | 11 12 13 | NOI |
| SNELLEN 20 EQUIVALENTS 200 | 20 20 100 70 | 20 20 20 50 40 35 | 20 20 30 25 | 20 <u>20</u> 22 20 | 20 20 20 18 17 15 0 0 0 0 0 | 20 TESTED |
| LEFT CORRECTEDO | 20 20 100 70 0 0 | 20 20 35 0 0 0 0 0 0 | 20 30 0 0 0 | 20 20 20 20 20 20 20 20 20 20 20 20 20 2 | 20 20 20 18 17 15 O O O O O | 0 8 |
| RIGHT CORRECTED O | 000 | ŏ ŏ ŏ | δŏ | . Σ Σ | $\mathcal{S} \mathcal{S} \mathcal{S}$ | |
| LEFT UNCORRECTED O | | | 000 | 20 20 20 20 20 20 20 20 20 20 20 20 20 2 | 20 20 20 18 17 15 0 0 0 0 0 0 | Ø Ø Ø Ø |
| RIGHT UNCORRECTEDO | | | | | | |
| TONOM | | CONTACT TO | ONOMETE | R) | | |
| NORMAL ABNORMAL NOT TESTED | | FT EYE | | | RIGHT EYE 0000000000000000000000000000000000 | |
| RIGHT O O & PRESSU | | 0000 00006 | മെയി | | -00000 | |
| NIGHT C C W MINITE | | | | | FORM QA AL | |
| @ ADDITIONAL TESTS RECOMMENDED? | | | | | | |
| DON ADDITIONAL 15313 DECOMMENDED | | ⊗ ® COMMEN | ITS? | 100 | 23456 1 | |
| OW ADDITIONAL 15313 RECOMMENDED! | | ⊘ ® COMMEN | ITS? | 0 | 23456 11 | |

| PARTICIPANT | | CASE NUMBER | GROUP NUMBER | |
|-----------------------------|---|--|--|--------------------------|
| | | 000000000000000000000000000000000000 | 9 0133456 9 EXAMINER I.D. 9 0133456 9 0033456 | |
| FORM AFHS - 22 | HEM | OCCULT EXAM | | 10 YEAR FOLLOW UP |
| PART 1 Please re alteration | cord the date of eac s from the hemoccul | ch stool sampled being the children of the chi | ow and describe any lacomplete part 2. | |
| | PACKET 1 | PACKET 2 | PACKET 3 | |
| Date of smear: | | | | |
| Comply with diet? | ⊘ № | ⊗ № | ⊗ ® | |
| Comments: | | | | |
| | | • | | |
| | | | | |
| PART 2 SKD HE | | E SAMPLE KIT E | XAMINATION RESULT | S |
| | PACKET 1 | PACKET 2 | PACKET 3 | |
| RESULTS : | | | | |
| (| "+" = Positive, "-" = No | Reaction or Negative, | "x" = No Sample Provided) | |
| SLIDE SAMPLE KIT | WAS: | HEMOCCU | LT EXAM WAS: | |
| O Complete (all 3 | packets) | O All n | egative | |
| O Incomplete (< 3 | packets) | O At le | ast 1 positive | |
| O Sampled at rect | al exam (0 packets) | | • | |
| Comments/Recommenda | tions: | | | |
| PRINTED NAME OF GAS | TROENTEROLOGIST | ID# INITIALS | DATE FORM QA AL ID# INITIA 0 3 9 9 9 | JDIT DONE BY ALS DATE |

U.S. AIR FORCE HEALTH STUDY - La Jolla, California

| | GROUP NUMBER |
|---|---|
| _ | 0123456789 |
| | 000000000000000000000000000000000000000 |



FORM AFHS - 31

EVALUATION

YEAR 10 FOLLOW-UP

Dear Health Study Participant:

To serve you and future study participants in the best way possible, please complete this short evaluation form. The form may be completed and delivered to the Health Study Logistic Coordinator following your outbriefing at the Scripps Clinic on the third day of your examination.

| | excellent | good | satisfactory | unsatisfactory |
|--|---|-------------------------------------|-------------------|---|
| Initial phone contact and recruitment Travel agent contact and travel arrangements Logistics Information Packet (mailed) Airport/Hotel shuttle service Hotel/Clinic van service Hotel accommodations Evening orientation meeting Wives orientation meeting Cafeteria meals at the Clinic Examination schedule at the Clinic Technicians (e.g., blood draw) Interviews Nursing Staff Psychologists Examining physicians Clinical outbriefing Air Force Health Study Monitor Overall clinical experience | .00000000000000000000000000000000000000 | 00000000000000000 | 00000000000000000 | 000000000000000000000000000000000000000 |
| Did any examining physician ask about yo (If yes, pleas | ur specific d se see the Ai | uties in Southea r Force On-site | ast Asia? | es Ono |
| Additional comments or acknowledgement | ts: | | | |
| | | | | |
| | | Name: | | |
| | | | (not re | equired) |

Mailing Address:

Air Force Health Study M/S D4
Science Applications International Corporation
10260 Campus Point Drive
San Diego, California 92121

APPENDIX D

Statistical Methods

Table D-1.
Summary of Statistical Analysis Situations by Dependent Variable Form,
Exposure Estimate, Analysis Cohort, and Analysis Type

| Dependent Variable Form | Exposure Estimate | Analysis Cohort | Analysis Type | Statistical Method | Independent Variables |
|-------------------------------|---|--|----------------------|--|---|
| Continuous | Group (Ranch | All RH & C | Unadjusted | t-Test | Group |
| | Hands vs. Comparisons) | | Adjusted | Analysis of Covariance | Group; Covariates; Group x Covariates; Covariates x Covariates |
| | | | Longitudinal* | Analysis of Covariance | Group; Age in 1992; 1982 Measurement |
| | Log ₂ (Initial) | RH > 10 ppt lipid- adjusted current dioxin | Unadjusted | Linear Regression | Log ₂ (Initial) |
| | | Cloan | Adjusted | Linear Regression | Log ₂ (Initial); Covariates; Log ₂ (Initial) x Covariates; Covariates x Covariates |
| | | Longitudinal* | Linear Regression | Log ₂ (Initial); Age in 1992; 1982 Measurement | |
| | Categorized Dioxin | All RH with a current dioxin measurement, C ≤ | Unadjusted | Analysis of Variance | DXCAT |
| | | 10 ppt lipid-adjusted current dioxin | Adjusted | Analysis of Covariance | DXCAT; Covariates; DXCAT x Covariates; Covariates x Covariates |
| | | | Longitudinal* | Analysis of Covariance | DXCAT; Age in 1992; 1982 Measurement |
| | Log ₂ (Current + 1) | All RH with a current dioxin measurement | Unadjusted | Linear Regression | Log ₂ (Current + 1) |
| | | Adjusted | Linear Regression | Log ₂ (Current + 1); Covariates; Log ₂ (Current + 1) x Covariates; Covariates x Covariates | |
| Discrete | Group (Ranch Hands vs. Comparisons) | All RH & C | Unadjusted | Chi-Square Contingency Table | Group |
| | | | Adjusted | Logistic Regression | Group; Covariates; Group x Covariates; Covariates x Covariates |

Table D-1. (Continued) Summary of Statistical Analysis Situations by Dependent Variable Form, Exposure Estimate, Analysis Cohort, and Analysis Type

| Dependent Variable Form | Exposure Estimate | Analysis Cohort | Analysis Type | Statistical Method | Independent Variables |
|-------------------------------|--------------------------------|--|------------------------|---|--|
| Discrete (Continued) | | | Longitudinal** | Logistic Regression | Group; Age in 1992 |
| | Log ₂ (Initial) | RH > 10 ppt lipid- adjusted current- | Unadjusted | Logistic Regression | Log ₂ (Initial) |
| | | dioxin | Adjusted | Logistic Regression | Log ₂ (Initial); Covariates; Log ₂ (Initial) x Covariates; Covariates x Covariates |
| | | Longitudinal** | Logistic Regression | Log ₂ (Initial); Age in 1992 | |
| | Categorized Dioxin | All RH with a current dioxin measurement, C ≤ 10 ppt lipid-adjusted current dioxin | Unadjusted | Logistic Regression | DXCAT |
| | | | Adjusted | Logistic Regression | DXCAT; Covariates; DXCAT x Covariates; Covariates x Covariates |
| | | | Longitudinal** | Logistic Regression | DXCAT; Age in 1992 |
| | Log ₂ (Current + 1) | All RH with a current dioxin measurement | Unadjusted | Logistic Regression | Log ₂ (Current + 1) |
| | · | incasurement | Adjusted | Logistic Regression | Log ₂ (Current + 1); Covariates; Log ₂ (Current + 1) x Covariates; Covariates x Covariates |

^{*} Dependent variable usually paired difference score of (1992 to 1982) dependent variable values. For some clinical areas, paired difference scores will be (1992 to 1985) differences.

Note: Log₂(Initial) = Logarithm (base 2) of estimated initial dioxin level.

 $Log_2(Current + 1) = Logarithm$ (base 2) of (current dioxin level + 1).

DXCAT = Categorized dioxin (incorporating group membership — three categories for Ranch Hands, one category for Comparisons).

RH = Ranch Hand.

C = Comparison.

Analyses using log_2 (initial) and categorized dioxin exposure estimates adjusted for percent body fat at the time of duty in SEA and change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin.

^{**} Analysis performed subject to the constraint that participant was normal at the 1982 Baseline (or 1985) examination.

Table D-2.

Approximate Power to Detect an Initial Dioxin Effect at a 5 Percent Level of Significance (Discrete Dependent Variable)

| | Relative Risk | | | | | | |
|------------------------------|---------------|------|------|------|------|------|------|
| Prevalence of — Condition | 1.10 | 1.20 | 1.30 | 1.40 | 1.50 | 1.75 | 2.00 |
| 0.005 | 0.06 | 0.07 | 0.10 | 0.14 | 0.19 | 0.37 | 0.59 |
| 0.01 | 0.06 | 0.09 | 0.15 | 0.22 | 0.32 | 0.62 | 0.85 |
| 0.02 | 0.07 | 0.13 | 0.24 | 0.39 | 0.55 | 0.87 | 0.98 |
| 0.03 | 0.08 | 0.18 | 0.33 | 0.52 | 0.71 | 0.95 | 1.00 |
| 0.04 | 0.09 | 0.22 | 0.41 | 0.63 | 0.81 | 0.98 | 1.00 |
| 0.05 | 0.10 | 0.25 | 0.49 | 0.72 | 0.88 | 1.00 | 1.00 |
| 0.10 | 0.15 | 0.42 | 0.73 | 0.92 | 0.98 | 1.00 | 1.00 |
| 0.15 | 0.19 | 0.54 | 0.85 | 0.97 | 1.00 | 1.00 | 1.00 |
| 0.20 | 0.22 | 0.63 | 0.91 | 0.99 | 1.00 | 1.00 | 1.00 |

Table D-3.

Approximate Power to Detect an Categorized Dioxin Effect (Low plus High Ranch Hands versus Comparisons) at a 5 Percent Level of Significance (Discrete Dependent Variable)

| D1 | | | P | Relative Risk | | | |
|------------------------------|------|------|------|---------------|------|------|------|
| Prevalence of - Condition | 1.10 | 1.20 | 1.30 | 1.40 | 1.50 | 1.75 | 2.00 |
| 0.005 | 0.05 | 0.06 | 0.06 | 0.08 | 0.09 | 0.13 | 0.17 |
| 0.01 | 0.05 | 0.06 | 0.08 | 0.10 | 0.13 | 0.20 | 0.29 |
| 0.02 | 0.06 | 0.08 | 0.11 | 0.15 | 0.20 | 0.35 | 0.51 |
| 0.03 | 0.06 | 0.09 | 0.14 | 0.20 | 0.28 | 0.48 | 0.67 |
| 0.04 | 0.06 | 0.11 | 0.17 | 0.25 | 0.35 | 0.59 | 0.79 |
| 0.05 | 0.07 | 0.12 | 0.20 | 0.30 | 0.41 | 0.69 | 0.86 |
| 0.10 | 0.08 | 0.18 | 0.33 | 0.50 | 0.66 | 0.92 | 0.99 |
| 0.15 | 0.10 | 0.24 | 0.44 | 0.64 | 0.80 | 0.98 | 1.00 |
| 0.20 | 0.11 | 0.28 | 0.52 | 0.74 | 0.88 | 0.99 | 1.00 |

Table D-4.

Approximate Power to Detect a Lipid-Adjusted Current Dioxin Effect at a 5 Percent Level of Significance (Discrete Dependent Variable)

| | Relative Risk | | | | | | | | |
|---------------------------|---------------|------|------|------|------|------|------|--|--|
| Prevalence of — Condition | 1.10 | 1.20 | 1.30 | 1.40 | 1.50 | 1.75 | 2,00 | | |
| 0.005 | 0.06 | 0.09 | 0.15 | 0.23 | 0.33 | 0.64 | 0.88 | | |
| 0.01 | 0.07 | 0.14 | 0.25 | 0.40 | 0.57 | 0.90 | 0.99 | | |
| 0.02 | 0.09 | 0.22 | 0.43 | 0.66 | 0.84 | 0.99 | 1.00 | | |
| 0.03 | 0.11 | 0.31 | 0.58 | 0.82 | 0.94 | 1.00 | 1.00 | | |
| 0.04 | 0.13 | 0.38 | 0.70 | 0.90 | 0.98 | 1.00 | 1.00 | | |
| 0.05 | 0.15 | 0.45 | 0.78 | 0.95 | 0.99 | 1.00 | 1.00 | | |
| 0.10 | 0.25 | 0.71 | 0.96 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| 0.15 | 0.33 | 0.84 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| 0.20 | 0.39 | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |

Table D-5.

Approximate Power to Detect a Whole-Weight Current Dioxin Effect at a 5 Percent Level of Significance (Discrete Dependent Variable)

| | Relative Risk | | | | | | | |
|---------------------------|---------------|------|------|------|------|------|------|--|
| Prevalence of — Condition | 1.10 | 1.20 | 1.30 | 1.40 | 1,50 | 1.75 | 2.00 | |
| 0.005 | 0.06 | 0.10 | 0.17 | 0.27 | 0.40 | 0.74 | 0.94 | |
| 0.01 | 0.08 | 0.16 | 0.30 | 0.48 | 0.66 | 0.95 | 1.00 | |
| 0.02 | 0.11 | 0.27 | 0.51 | 0.75 | 0.91 | 1.00 | 1.00 | |
| 0.03 | 0.13 | 0.37 | 0.67 | 0.89 | 0.98 | 1.00 | 1.00 | |
| 0.04 | 0.16 | 0.46 | 0.79 | 0.95 | 0.99 | 1.00 | 1.00 | |
| 0.05 | 0.19 | 0.54 | 0.86 | 0.98 | 1.00 | 1.00 | 1.00 | |
| 0.10 | 0.31 | 0.80 | 0.98 | 1.00 | 1.00 | 1.00 | 1.00 | |
| 0.15 | 0.41 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| 0.20 | 0.49 | 0.96 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |

Table D-6.

Approximate Power to Detect an Initial Dioxin Effect at a 5 Percent Level of Significance (Continuous Dependent Variable)

| _ | Coefficient of Variation (100σ/μ) | | | | | | | | |
|-------------|-----------------------------------|------|------|------|------|--|--|--|--|
| Mean Change | 5 | 10 | 25 | 50 | 75 | | | | |
| 0.005 | 0.99 | 0.59 | 0.14 | 0.07 | 0.06 | | | | |
| 0.01 | 1.00 | 0.99 | 0.41 | 0.14 | 0.09 | | | | |
| 0.02 | 1.00 | 1.00 | 0.94 | 0.41 | 0.21 | | | | |
| 0.03 | 1.00 | 1.00 | 1.00 | 0.74 | 0.41 | | | | |
| 0.04 | 1.00 | 1.00 | 1.00 | 0.94 | 0.64 | | | | |
| 0.05 | 1.00 | 1.00 | 1.00 | 0.99 | 0.83 | | | | |
| 0.10 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | |

Table D-7.

Approximate Power to Detect an Categorized Dioxin Effect (Low plus High Ranch Hands versus Comparisons) at a 5 Percent Level of Significance (Continuous Dependent Variable)

| _ | Coefficient of Variation (100σ/μ) | | | | | | | |
|-------------|-----------------------------------|------|------|------|------|--|--|--|
| Mean Change | 5 | 10 | 25 | 50 | 75 | | | |
| 0.005 | 0.46 | 0.15 | 0.07 | 0.05 | 0.05 | | | |
| 0.01 | 0.96 | 0.46 | 0.12 | 0.07 | 0.06 | | | |
| 0.02 | 1.00 | 0.96 | 0.32 | 0.12 | 0.08 | | | |
| 0.03 | 1.00 | 1.00 | 0.61 | 0.20 | 0.12 | | | |
| 0.04 | 1.00 | 1.00 | 0.85 | 0.32 | 0.17 | | | |
| 0.05 | 1.00 | 1.00 | 0.96 | 0.46 | 0.24 | | | |
| 0.10 | 1.00 | 1.00 | 1.00 | 0.96 | 0.70 | | | |

Table D-8.

Approximate Power to Detect a Lipid-Adjusted Current Dioxin Effect at a 5 Percent Level of Significance (Continuous Dependent Variable)

| Mean Change | 5 | 10 | 25 | 50 | 75 |
|-------------|------|------|------|------|------|
| 0.005 | 0.86 | 0.33 | 0.09 | 0.06 | 0.05 |
| 0.01 | 1.00 | 0.86 | 0.23 | 0.09 | 0.07 |
| 0.02 | 1.00 | 1.00 | 0.68 | 0.23 | 0.13 |
| 0.03 | 1.00 | 1.00 | 0.95 | 0.44 | 0.23 |
| 0.04 | 1.00 | 1.00 | 1.00 | 0.68 | 0.37 |
| 0.05 | 1.00 | 1.00 | 1.00 | 0.86 | 0.52 |
| 0.10 | 1.00 | 1.00 | 1.00 | 1.00 | 0.98 |

Table D-9.

Approximate Power to Detect a Whole-Weight Current Dioxin Effect at a 5 Percent Level of Significance (Continuous Dependent Variable)

| | | Coefficient of Variation $(100\sigma/\mu)$ | | | | | |
|-------------|------|--|------|------|------|--|--|
| Mean Change | 5 | 10 | 25 | 50 | 75 | | |
| 0.005 | 1.00 | 0.72 | 0.17 | 0.08 | 0.06 | | |
| 0.01 | 1.00 | 1.00 | 0.53 | 0.17 | 0.10 | | |
| 0.02 | 1.00 | 1.00 | 0.98 | 0.53 | 0.27 | | |
| 0.03 | 1.00 | 1.00 | 1.00 | 0.86 | 0.53 | | |
| 0.04 | 1.00 | 1.00 | 1.00 | 0.98 | 0.77 | | |
| 0.05 | 1.00 | 1.00 | 1.00 | 1.00 | 0.92 | | |
| 0.10 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |

APPENDIX E-1.

Dependent Variable-Covariate Associations for the General Health Assessment

This appendix contains results of tests of association between each dependent variable and candidate covariates for the adjusted analysis of each dependent variable. Pearson's chi-square test (continuity-adjusted for 2×2 tables) is used for significance testing of the associations between each discrete dependent variable and the candidate covariate. When a candidate covariate is continuous in nature (for example, age), the covariate is discretized prior to the analysis of the discrete dependent variable. Pearson's correlation coefficient is used for significance testing of the associations between each continuous dependent variable and a continuous candidate covariate. When a candidate covariate is discrete in nature, means (transformed back to the original scale, if necessary) are presented and an analysis of variance is used to investigate the difference between the means.

Table E-1-1.

Dependent Variable-Covariate Associations for the General Health Assessment

| | | | Age | Race | | | |
|---|-----------------|------------------------|------------------------------|-----------------|---|---------------------------------------|----------------|
| Dependent Variable | Level | Born ≥1942 | Born <1942 | p-Value | Black | Non-Black | p-Value |
| Self-Perception of Health | Fair or Poor | (n=954) 7.4% | (n=1,277) 9.6% | 0.082 | (n=131) 8.4% | (n=2,100) 8.7% | 0.999 |
| Appearance of Illness or Distress | Yes | (n=956) 1.2% | (n=1,277) 2.4% | 0.041 | (n=131) 1.5% | (n=2,102) 1.9% | 0.999 |
| Relative Age Appearance | Older | (n=956) 5.9% | (n=1,277) 6.0% | 0.998 | (n=131) 1.5% | (n=2,102) 6.2% | 0.045 |
| Body Fat (continuous) ^a (discrete) | Obese | (n=956) r= 25.0% | (n=1,277) :0.009 25.9% | 0.681 0.657 | (n=131) $\bar{x}=22.01$ 29.0% | (n=2,102) $\bar{x}=21.88$ 25.3% | 0.784 0.402 |
| Sedimentation Rate (continuous) ^b (discrete) | Abnormal | (n=955) r= 17.4% | (n=1,277) 0.214 17.7% | <0.001 0.891 | $\begin{array}{c} (n=131) \\ \overline{x} = 8.97 \\ 22.9\% \end{array}$ | (n=2,101) $\bar{x}=8.07$ 17.2% | 0.179 0.124 |

^a Analysis performed on natural logarithm scale; means transformed from natural logarithm scale.

^b Analysis performed on natural logarithm of sedimentation rate + 0.1 scale; means transformed from natural logarithm of sedimentation rate + 0.1 scale.

Table E-1-1. (Continued)
Dependent Variable-Covariate Associations for the General Health Assessment

| | | | Occu | Pe | rsonality Ty | /pe | | |
|--|-----------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------|------------------------------------|--------------------------------------|-----------------|
| Dependent Variable | Level | Officer | Enlisted Flyer | Enlisted Groundcrew | p-Value | Туре А | Type B | p-Value |
| Self- Perception of Health | Fair or Poor | (n=869) 5.9% | (n=365) 11.2% | (n=997) 10.2% | 0.001 | (n=954) 8.7% | (n=1,275) 8.7% | 0.999 |
| Appearance of Illness or Distress | Yes | (n=869) 1.7% | (n=365) 1.9% | (n=999) 2.0% | 0.907 | | | |
| Relative Age Appearance | Older | (n=869) 3.6% | (n=365) 8.0% | (n=999) 7.2% | 0.001 | | | |
| Body Fat (continuous) ^a (discrete) | Obese | (n=869) $\bar{x}=21.64$ 22.7% | (n=365) $\bar{x}=21.65$ 23.3% | (n=999) $\bar{x}=22.20$ 28.8% | 0.039 0.005 | ••• | | |
| Sedimentation Rate (continuous) ^b (discrete) | Abnormal | (n=869) $\bar{x}=7.64$ 14.0% | (n=364) $\bar{x}=9.27$ 22.3% | (n=999) $\bar{x}=8.15$ 18.9% | 0.002 0.001 | (n=954) $\bar{x}=7.46$ 14.9% | (n=1,276) $\bar{x}=8.63$ 19.5% | <0.001 0.005 |

| | | Caloric 1 | Intake (kca | l/day) |
|---------------------------|-------|-----------|-------------|---------|
| Dependent Variable | Level | ≤ 2,000 | > 2,000 | p-Value |
| Body Fat | | (n=1,322) | (n=907) | |
| (continuous) ^a | | r = -0. | 070 | 0.001 |
| (discrete) | Obese | 27.1% | 23.3% | 0.048 |

^a Analysis performed on natural logarithm scale; means transformed from natural logarithm scale.

 $^{^{\}rm b}$ Analysis performed on natural logarithm of sedimentation rate + 0.1 scale; means transformed from natural logarithm of sedimentation rate + 0.1 scale.

^{--:} Covariate not applicable for dependent variable.

APPENDIX E-2.

Interaction Tables for the General Health Assessment

This appendix contains exposure analyses results of interactions between covariates and group or dioxin. Results are presented for each separate strata of the covariate and include sample sizes, percent abnormal, relative risks, confidence intervals, and p-values for discrete dependent variables. Sample sizes, adjusted means, differences of adjusted means and confidence intervals or adjusted slopes and standard errors, and p-values are given for continuous dependent variables. Means are transformed back to the original scale, if necessary. Chapter 7, Statistical Methods, provides further details on the analytical approaches used in the interaction analyses. The covariate involved in the interaction and a reference to the analysis table in Chapter 9 are given in the heading of each subtable. A summary of the interactions described in this appendix follows.

| Appendix E-2 Table | Chapter 9 Table | Dependent Variable | Model | Covariate |
|-----------------------|--------------------|--|-------------|------------------------------|
| E-2-1 | 9-3 | Self-Perception of Health | 4 5 6 | Age Age Age |
| E-2-2 | . 9-4 | Appearance of Illness or Distress | 4 5 6 | Age Age Age |
| E-2-3 | 9-5 | Relative Age Appearance | 4 | Occupation |
| E-2-4 | 9-6 | Body Fat (Continuous) | 4 | Occupation |
| E-2-5 | 9-7 | Body Fat with Adjustment for Caloric Intake (Continuous) | 3 4 | Caloric Intake Occupation |
| E-2-6 | 9-8 | Body Fat (Discrete) | 4 | Occupation |
| E-2-7 | 9-9 | Body Fat with Adjustment for Caloric Intake (Discrete) | 4 | Occupation |

Table E-2-1.
Interaction Table for Self-Perception of Health

| - | a) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Age: Table 9-3) | | | | | | | | | | |
|---|---|-------------------|---------------------|--|------------------------------|--|--|--|--|--|--|
| Current Dioxin Category Summary Statistics Current Percent Fair Stratum Dioxin n or Poor | | | | Analysis Results for Log ₂ (Adjusted Relative Risk (95% C.I.) ² | (Current Dioxin + 1) p-Value | | | | | | |
| Born≥1942 | Low Medium High | 99 97 171 | 5.1 4.1 11.7 | 1.26 (0.98,1.61) | 0.067 | | | | | | |
| Born < 1942 | Low Medium High | 196 203 128 | 7.7 11.8 18.0 | 1.12 (0.91,1.39) | 0.287 | | | | | | |

| | b) MODEL 5: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Age: Table 9-3) | | | | | | | | | | |
|-------------|---|---------|----------------------|---|----------------------|--|--|--|--|--|--|
| Current 1 | Dioxin Categor | y Summa | | Analysis Results for Log ₂ | (Current Dioxin + 1) | | | | | | |
| Stratum | Current Dioxin | n | Percent Fair or Poor | Adjusted Relative Risk (95% C.I.) ^a | p-Value | | | | | | |
| Born ≥ 1942 | Low | 103 | 3.9 | 1.27 (1.01,1.59) | 0.041 | | | | | | |
| | Medium | 96 | 7.3 | | | | | | | | |
| | High | 168 | 10.7 | | | | | | | | |
| Born < 1942 | Low | 197 | 7.6 | 1.14 (0.95,1.37) | 0.172 | | | | | | |
| | Medium | 201 | 11.4 | | | | | | | | |
| | High | 129 | 18.6 | | | | | | | | |

| | c) MODEL 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Age: Table 9-3) | | | | | | | | | |
|--------------------|---|-------------------|--|-----------------------------|-------|--|--|--|--|--|
| Current Stratum | Dioxin Catego Current Dioxin | ry Summary n | Analysis Results for Log ₂ Adjusted Relative Risk (95% C.L.) ^a | Current Dioxin + 1) p-Value | | | | | | |
| Born≥1942 | Low Medium High | 103 96 168 | 3.9 7.3 10.7 | 1.18 (0.94,1.49) | 0.161 | | | | | |
| Born < 1942 | Low Medium High | 196 201 129 | 7.6 11.4 18.6 | 1.04 (0.86,1.27) | 0.678 | | | | | |

^a Relative risk for a twofold increase in current dioxin.

Note: Model 4: Low = \leq 8.1 ppt; Medium = >8.1-20.5 ppt; High = >20.5 ppt. Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

Table E-2-2.
Interaction Table for Appearance of Illness or Distress

| a) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Age: Table 9-4) | | | | | | | | | |
|--|---------------------------------------|-------------------|------------------------------|--|------------------------------|--|--|--|--|
| Current D Stratum | ioxin Category S Current Dioxin | Summary S n | Statistics Percent Yes | Analysis Results for Log ₂ Adjusted Relative Risk (95% C.I.) ² | (Current Dioxin + 1) p-Value | | | | |
| Born ≥ 1942 | Low Medium High | 99 97 171 | 0.0 0.0 1.8 | 1.25 (0.63,2.50) | 0.523 | | | | |
| Born < 1942 | Low Medium High | 196 203 128 | 3.6 2.0 3.1 | 0.87 (0.57,1.33) | 0.512 | | | | |

| b) MODEL 5: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Age: Table 9-4) | | | | | | | | | |
|---|-----------------------|-------------------|-------------------|---|---------|--|--|--|--|
| Current Dioxin Category Summary Statistics Analysis Results for Log ₂ (Current Dioxin + 1) | | | | | | | | | |
| Stratum | Current Dioxin | D | Percent Yes | Adjusted Relative Risk (95% C.I.) ² | p-Value | | | | |
| Born≥1942 | Low Medium High | 103 96 168 | 0.0 1.0 1.2 | 1.19 (0.64,2.24) | 0.583 | | | | |
| Born < 1942 | Low Medium High | 197 201 129 | 3.6 2.0 3.1 | 0.86 (0.62,1.20) | 0.383 | | | | |

| | c) MODEL 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Age: Table 9-4) | | | | | | | | | |
|-------------|---|--------------------------|--------------------------|---|---------------------|--|--|--|--|--|
| Current D | ioxin Category S | Summary | Statistics | Analysis Results for Log ₂ (| Current Dioxin + 1) | | | | | |
| Stratum | Current Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ² | p-Value | | | | | |
| Born≥1942 | Low Medium | 103 96 | 0.0 1.0 | 1.16 (0.62,2.19) | 0.643 | | | | | |
| Born < 1942 | High Low Medium High | 168 196 201 129 | 1.2 3.6 2.0 3.1 | 0.83 (0.59,1.18) | 0.299 | | | | | |

^a Relative risk for a twofold increase in current dioxin.

Note: Model 4: Low = \leq 8.1 ppt; Medium = >8.1-20.5 ppt; High = >20.5 ppt. Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

Table E-2-3.
Interaction Table for Relative Age Appearance

a) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Occupation: Table 9-5) Analysis Results for Log₂ (Current Dioxin + 1) **Current Dioxin Category Summary Statistics** Adjusted Relative Risk Current Percent (95% C.I.)2 p-Value Older Dioxin Stratum n 0.011 0.45 (0.24, 0.83) Officer Low 193 4.1 Medium 141 1.4 High 14 0.0 0.706 0.92 (0.59,1.44) 12.9 **Enlisted Flyer** Low 31 Medium 57 7.0 62 9.7 High 0.443 1.11 (0.85,1.46) 5.6 **Enlisted** Low 71 2.0 102 Groundcrew Medium 223 7.6 High

Note: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt.

^a Relative risk for a twofold increase in current dioxin.

Table E-2-4. Interaction Table for Body Fat (Percent) (Continuous)

| a) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Occupation: Table 9-6) | | | | | | | | | |
|---|-----------------------|------------------|-------------------------|---|----------------------|--|--|--|--|
| Current Die | oxin Category S | Summary | Statistics | Analysis Results for Log ₂ | (Current Dioxin + 1) | | | | |
| Stratum | Current Dioxin | n | Adjusted Mean | Adjusted Slope (Std. Error) ² | p-Value | | | | |
| Officer | Low Medium High | 193 141 14 | 20.63 23.16 23.79 | 0.089 (0.015) | <0.001 | | | | |
| Enlisted Flyer | Low Medium High | 31 57 62 | 19.14 21.65 23.31 | 0.082 (0.015) | <0.001 | | | | |
| Enlisted Groundcrew | Low Medium High | 71 102 223 | 19.11 21.88 23.27 | 0.051 (0.007) | <0.001 | | | | |

^a Slope and standard error based on natural logarithm of body fat versus log₂ (current dioxin + 1).

Note: Low = $\leq 8.1 \text{ ppt}$; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt.

Table E-2-5.
Interaction Table for Body Fat (Percent) with Adjustment for Caloric Intake (Continuous)

a) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Caloric Intake: Table 9-7)

| Stratum | Dioxin Category | n | Adjusted Mean ^a | Difference of Adjusted Mean vs. Comparisons (95% C.I.) ^b | p-Value ^c |
|----------|------------------|-----|-------------------------------|---|----------------------|
| ≤2,000 | Comparison | 629 | 21.94 | | |
| Kcal/Day | Background RH | 205 | 21.96 | 0.03 | 0.886 |
| | Low RH | 162 | 22.18 | 0.24 | 0.245 |
| | High RH | 162 | 21.95 | 0.01 | 0.949 |
| | Low plus High RH | 324 | 21.72 | 0.13 | 0.425 |
| >2,000 | Comparison | 432 | 22.13 | | |
| Kcal/Day | Background RH | 169 | 21.65 | -0.48 | 0.023 |
| | Low RH | 98 | 22.09 | -0.04 | 0.869 |
| | High RH | 96 | 21.36 | 0.77 | 0.003 |
| | Low plus High RH | 194 | 21.72 | -0.41 | 0.046 |

| b) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Occupation: Table 9-7) | | | | | | | | | | |
|---|--------------------------------------|------------------|--|------------------------------|--------|--|--|--|--|--|
| Current Die | oxin Category S Current Dioxin | Summary n | Analysis Results for Log ₂ Adjusted Slope (Std. Error) ^d | (Current Dioxin + 1) p-Value | | | | | | |
| Officer | Low Medium High | 193 141 14 | 20.60 23.14 23.78 | 0.090 (0.015) | <0.001 | | | | | |
| Enlisted Flyer | Low Medium High | 31 57 61 | 19.12 21.70 23.19 | 0.082 (0.015) | <0.001 | | | | | |
| Enlisted Groundcrew | Low Medium High | 71 102 222 | 19.32 21.97 23.25 | 0.049 (0.007) | <0.001 | | | | | |

^a Transformed from natural logarithm scale.

Note: Model 3: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt.

^b Difference of means after transformation to original scale; confidence interval on difference of means not presented because analysis was performed on natural logarithm scale.

^c P-value is based on difference of means on natural logarithm scale.

^d Slope and standard error based on natural logarithm of body fat versus log₂ (current dioxin + 1).

Table E-2-6. Interaction Table for Body Fat (Discrete)

- a) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED
(Current Dioxin-by-Occupation: Table 9-8)

Current Dioxin Catagori Supreservi Statistics — Analysis Results for Log (Current Dioxin)

| Current Dioxin Category Summary Statistics | | | | Analysis Results for Log ₂ (Current Dioxin + 1) | | |
|--|-------------------|-----|------------------|--|---------|--|
| Stratum | Current Dioxin | n | Percent Obese | Adjusted Relative Risk (95% C.I.) ^a | p-Value | |
| Officer | Low | 193 | 13.0 | 2.10 (1.45,3.03) | < 0.001 | |
| | Medium | 141 | 29.8 | | | |
| | High | 14 | 50.0 | | | |
| Enlisted Flyer | Low | 31 | 6.5 | 1.89 (1.31,2.72) | 0.001 | |
| | Medium | 57 | 19.3 | | | |
| | High | 62 | 34.4 | | | |
| Enlisted | Low | 71 | 11.3 | 1.29 (1.12,1.50) | 0.001 | |
| Groundcrew | Medium | 102 | 27.5 | | | |
| | High | 223 | 36.0 | | | |

^a Relative risk for a twofold increase in current dioxin.

Note: Low = $\leq 8.1 \text{ ppt}$; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt.

Table E-2-7.
Interaction Table for Body Fat with Adjustment for Caloric Intake (Discrete)

| a) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Occupation: Table 9-9) | | | | | | | | |
|---|-----------------------|------------------|----------------------|---|---------------------|--|--|--|
| Current Di | ioxin Category | Summary | Statistics | Analysis Results for Log ₂ (| Current Dioxin + 1) | | | |
| Stratum | Current Dioxin | n | Percent Obese | Adjusted Relative Risk (95% C.I.) ^a | p-Value | | | |
| Officer | Low Medium High | 193 141 14 | 13.0 29.8 50.0 | 2.10 (1.45,3.03) | <0.001 | | | |
| Enlisted Flyer | Low Medium High | 31 57 61 | 6.5 19.3 34.4 | 1.82 (1.25,2.64) | 0.002 | | | |
| Enlisted Groundcrew | Low Medium High | 71 102 222 | 11.3 27.5 36.0 | 1.29 (1.11,1.50) | 0.001 | | | |

^a Relative risk for a twofold increase in current dioxin.

Note: Low = \leq 8.1 ppt; Medium = >8.1-20.5 ppt; High = >20.5 ppt.

APPENDIX E-3.

General Health Analysis Tables Occupation Removed from Final Model

This appendix contains results of exposure analyses after occupation has been removed from those final dioxin models (Models 2 through 6) that contained occupation. These analyses are performed to investigate the relationship of the dependent variable to dioxin without removing any effects due to occupation. The format of these tables closely parallels the adjusted panels of Chapter 9 tables. A summary of the tables found in this appendix follows.

| Appendix E-3 Table | Chapter 9 Table | Dependent Variable | | |
|-----------------------|--------------------|--|--|--|
| E-3-1 | 9-3 | Self-Perception of Health | | |
| E-3-2 | 9-4 | Relative Age Appearance | | |
| E-3-3 | 9-6 | Body Fat (Continuous) | | |
| E-3-4 | 9-7 | Body Fat with Adjustment for Caloric Intake (Continuous) | | |
| E-3-5 | 9-8 | Body Fat (Discrete) | | |
| E-3-6 | 9-9 | Body Fat with Adjustment for Caloric Intake (Discrete) | | |
| E-3-7 | 9-10 | Sedimentation Rate (Continuous) | | |
| E-3-8 | 9-11 | Sedimentation Rate (Discrete) | | |

Table E-3-1.
Analysis of Self-Perception of Health
Occupation Removed from Final Model

| 520 | 1.30 (1.06,1.58) | 0.010 | AGE (p=0.025) |
|-----|---|--------------------------------------|------------------------|
| n | Adj. Relative Risk (95% C.I.) ^b | p-Value | Covariate Remarks |
| | Analysis | Results for Log ₂ (Initia | l Dioxin) ^a |
| | a) MODEL 2: RANC | H HANDS — INITIAL I | DIOXIN — ADJUSTED |

^a Adjusted for percent body fat at time of duty in SEA, change in percent body fat from time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

| b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED | | | | | | | |
|---|-------|--|---------|-------------------|--|--|--|
| Dioxin Category | n | Adj. Relative Risk (95% C.I.) ^{ab} | p-Value | Covariate Remarks | | | |
| Comparison | 1,061 | | | AGE $(p=0.003)$ | | | |
| Background RH | 374 | 0.95 (0.59,1.53) | 0.842 | | | | |
| Low RH | 260 | 1.50 (0.94,2.39) | 0.090 | | | | |
| High RH | 260 | 2.55 (1.68,3.89) | < 0.001 | | | | |
| Low plus High RH | 520 | 1.98 (1.39,2.82) | <0.001 | | | | |

^a Relative risk and confidence interval relative to Comparisons.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Relative risk for a twofold increase in initial dioxin.

^b Adjusted for percent body fat at time of duty in SEA, change in percent body fat from time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Table E-3-1. (Continued) Analysis of Self-Perception of Health Occupation Removed from Final Model

| | e) MODELS | 4, 5, AND 6: RANCH I | HANDS — CURI | RENT DIOXIN — ADJUSTED |
|--------------------|-----------|---|-------------------------------|------------------------|
| | | Analysis Resul | lts for Log ₂ (Cur | rent Dioxin + 1) |
| Model ^a | n | Adj. Relative Risk (95% C.I.) ^b | p-Value | Covariate Remarks |
| 4 | 894 | 1.35 (1.16,1.57) | <0.001 | AGE (p=0.001) |
| 5 | 894 | 1.33 (1.16,1.53) | < 0.001 | AGE $(p=0.001)$ |
| 6 ^c | 893 | 1.25 (1.08,1.45) | 0.003 | AGE $(p=0.003)$ |

^a Model 4: Log₂ (lipid-adjusted current dioxin + 1).

Model 5: Log_2 (whole-weight current dioxin + 1).

Model 6: Log₂ (whole-weight current dioxin + 1), adjusted for log₂ total lipids.

^b Relative risk for a twofold increase in current dioxin.

^c Adjusted for log₂ total lipids in addition to covariates specified under "Covariate Remarks" column.

Table E-3-2.
Analysis for Relative Age Appearance
Occupation Removed from Final Model

| a) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED | | | | | | | |
|---|-------|--|---------|-------------------|--|--|--|
| Dioxin Category | n | Adj. Relative Risk (95% C.I.) ^{ab} | p-Value | Covariate Remarks | | | |
| Comparison | 1,063 | | | RACE (p=0.007) | | | |
| Background RH | 374 | 0.67 (0.38,1.18) | 0.166 | | | | |
| Low RH | 260 | 0.70 (0.36,1.35) | 0.285 | | | | |
| High RH | 260 | 1.30 (0.77,2.19) | 0.329 | | | | |
| Low plus High RH | 520 | 1.00 (0.64,1.55) | 0.984 | | | | |

^a Relative risk and confidence interval relative to Comparisons.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Adjusted for percent body fat at time of duty in SEA, change in percent body fat from time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Table E-3-3. Analysis of Body Fat (Percent) (Continuous) Occupation Removed from Final Model

| a) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED | | | | | | | | | |
|--|--|----------------|----------------|----------------|--|---------|-------------------|--|--|
| Model ^b | Current Dioxin Category Adjusted Mean ^a /(n) | | | | Analysis Results for Log ₂ (Current Dioxin + 1) | | | | |
| | Low | Medium | High | R ² | Adj. Slope (Std. Error) ^c | p-Value | Covariate Remarks | | |
| 4 | 20.07 (295) | 22.34 (300) | 23.16 (299) | 0.089 | 0.0489 (0.0053) | < 0.001 | AGE (p=0.127) | | |
| 5 | 20.00 (300) | 22.32 (297) | 23.30 (297) | 0.098 | 0.0439 (0.0045) | < 0.001 | AGE (p=0.173) | | |
| 6 ^d | 20.11 (299) | 22.34 (297) | 23.17 (297) | 0.092 | 0.0412 (0.0047) | <0.001 | | | |

^a Transformed from natural logarithm scale.

Model 6: Log₂ (whole-weight current dioxin + 1), adjusted for log₂ total lipids.

Note: Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt. Models 5 and 6: Low = ≤ 46 ppq; Medium = > 46-128 ppq; High = > 128 ppq.

^b Model 4: Log₂ (lipid-adjusted current dioxin + 1).

Model 5: Log_2 (whole-weight current dioxin + 1).

^c Slope and standard error based on natural logarithm of body fat versus log₂ (current dioxin + 1).

^d Adjusted for log₂ total lipids.

Table E-3-4.

Analysis of Body Fat (Percent) with Adjustment for Caloric Intake (Continuous)

Occupation Removed from Final Model

| | a) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED | | | | | | | | | |
|---------------------------|--|------------------------------|----------------|----------------|--|---------|----------------------|--|--|--|
| | | ent Dioxin C ljusted Mean | | | Analysis Results for Log ₂ (Current Dioxin + 1) | | | | | |
| Model ^b | Low | Medium | High | R ² | Adj. Slope (Std. Error) ^c | p-Value | Covariate Remarks | | | |
| 4 | 20.10 (295) | 22.32 (300) | 23.12 (297) | 0.095 | 0.0481 (0.0053) | <0.001 | AGE*CALINT (p=0.081) | | | |
| 5 | 20.03 (300) | 22.32 (297) | 23.26 (295) | 0.104 | 0.0432 (0.0045) | <0.001 | AGE*CALINT (p=0.095) | | | |
| 6 ^d | 20.12 (299) | 22.32 (297) | 23.18 (295) | 0.100 | 0.0422 (0.0048) | <0.001 | AGE*CALINT (p=0.101) | | | |

^a Transformed from natural logarithm scale.

Note: Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt. Models 5 and 6: Low = ≤ 46 ppq; Medium = > 46-128 ppq; High = > 128 ppq.

^b Model 4: Log₂ (lipid-adjusted current dioxin + 1).

Model 5: Log_2 (whole-weight current dioxin + 1).

Model 6: Log_2 (whole-weight current dioxin + 1), adjusted for log_2 total lipids.

 $^{^{\}rm c}$ Slope and standard error based on natural logarithm of body fat versus \log_2 (current dioxin + 1).

^d Adjusted for log₂ total lipids in addition to covariates specified under "Covariate Remarks" column.

Table E-3-5. Analysis of Body Fat (Discrete) Occupation Removed from Final Model

| | _ a) M | ODEL 4: RANCH HAN | DS — CURREI | NT DIOXIN — ADJUSTED |
|--------|--------|--|------------------------------|--|
| Modela | n | Analysis Rest Adj. Relative Risk (95% C.I.) ^b | ults for Log ₂ (C | Current Dioxin + 1) Covariate Remarks |
| 4 | 894 | 1.42 (1.27,1.58) | < 0.001 | AGE*RACE (p=0.059) |

^a Model 4: Log₂ (lipid-adjusted current dioxin + 1).

Table E-3-6.

Analysis of Body Fat (Percent) with Adjustment for Caloric Intake (Discrete)

Occupation Removed from Final Model

| | a) M | ODEL 4: RANCH HAN | DS — CURREN | T DIOXIN — ADJUSTED |
|--------------------|------|---|---|---|
| Model ² | n | Analysis Res Adj. Relative Risk (95% C.I.) ^b | nults for Log ₂ (Co p-Value | urrent Dioxin + 1) Covariate Remarks |
| 4 | 892 | 1.41 (1.26,1.58) | <0.001 | AGE*RACE (p=0.061) CALINT (p=0.407) |

^a Model 4: Log₂ (lipid-adjusted current dioxin + 1).

^b Relative risk for a twofold increase in current dioxin.

^b Relative risk for a twofold increase in current dioxin.

Table E-3-7.

Analysis of Sedimentation Rate (mm/hr) (Continuous)

Occupation Removed from Final Model

| a) MODEL 3: | RANCH | HANDS AND | COMPARISONS BY DIOX | IN CATEG | ORY — ADJUSTED |
|------------------|-------|----------------------------|---|----------------------|------------------------|
| Dioxin Category | n | Adj. Mean ^{ab} | Difference of Adj. Mean vs. Comparisons (95% C.I.) ^c | p-Value ^d | Covariate Remarks |
| Comparison | 1,062 | 8.04 | | | AGE*PERS ($p=0.004$) |
| Background RH | 374 | 7.71 | -0.33 | 0.409 | |
| Low RH | 259 | 8.69 | 0.66 | 0.176 | |
| High RH | 260 | 9.21 | 1.18 | 0.019 | |
| Low plus High RH | 519 | 8.95 | 0.90 | 0.017 | |

^a Transformed from natural logarithm scale of sedimentation rate + 0.1.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

| | b) MOI | ELS 4, 5, Al | ND 6: RA | NCH HA | NDS — CURRI | ENT DIOXI | N — ADJUSTED | | |
|--------------------|--|---------------|---------------|--|---|-----------|---------------------------------|--|--|
| Model ^b | Current Dioxin Category Adjusted Mean ^a /(n) | | | Analysis Results for Log_2 (Current Dioxin + 1) | | | | | |
| | Low | Medium | High | \mathbb{R}^2 | Adj. Slope (Std. Error) ^c | p-Value | Covariate Remarks | | |
| 4 | 7.29 (295) | 8.27 (299) | 9.53 (299) | 0.067 | 0.0746 (0.0198) | <0.001 | AGE (p<0.001) PERS (p=0.008) | | |
| 5 | 7.22 (300) | 8.32 (296) | 9.57 (297) | 0.072 | 0.0733 (0.0168) | <0.001 | AGE (p<0.001) PERS (p=0.008) | | |
| 6 ^d | 7.54 (299) | 8.37 (296) | 9.06 (297) | 0.086 | 0.0524 (0.0182) | 0.004 | AGE (p<0.001) PERS (p=0.003) | | |

^a Transformed from natural logarithm scale of sedimentation rate + 0.1.

Model 5: Log_2 (whole-weight current dioxin + 1).

Model 6: Log_2 (whole-weight current dioxin + 1), adjusted for log_2 total lipids.

Note: Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt. Models 5 and 6: Low = ≤ 46 ppq; Medium = > 46-128 ppq; High = > 128 ppq.

^b Adjusted for percent body fat at time of duty in SEA, change in percent body fat from time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

^c Difference of adjusted means after transformation to original scale; confidence interval on difference of adjusted means not presented because analysis was performed on natural logarithm scale of sedimentation rate + 0.1.

 $^{^{\}rm d}$ P-value is based on difference of means on natural logarithm scale of sedimentation rate + 0.1.

^b Model 4: Log₂ (lipid-adjusted current dioxin + 1).

^c Slope and standard error based on natural logarithm of sedimentation rate of + 0.1 versus \log_2 (current dioxin + 1).

^d Adjusted for log₂ total lipids in addition to covariates specified under "Covariate Remarks" column.

Table E-3-8.

Analysis of Sedimentation Rate (Discrete)
Occupation Removed from Final Model

| a) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED | | | | | | | |
|---|-------|--|---------|--------------------|--|--|--|
| Dioxin Category | п | Adj. Relative Risk (95% C.I.) ^{ab} | p-Value | Covariate Remarks | | | |
| Comparison | 1,062 | | | AGE*PERS (p=0.005) | | | |
| Background RH | 374 | 0.78 (0.56,1.11) | 0.167 | | | | |
| Low RH | 259 | 1.28 (0.91,1.81) | 0.150 | | | | |
| High RH | 260 | 1.25 (0.88,1.78) | 0.213 | | | | |
| Low plus High RH | 519 | 1.27 (0.97,1.66) | 0.086 | | | | |

^a Relative risk and confidence interval relative to Comparisons.

Note: RH = Ranch Hand.

Comparison: Current Dioxin \leq 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

| | b) MODI | ELS 4 AND 6: RANCH | HANDS — CURR | ENT DIOXIN — ADJUSTED |
|--------------------|---------|---|-------------------------------|---------------------------------|
| | | Analysis Res | ults for Log ₂ (Cu | rrent Dioxin + 1) |
| Model ² | n | Adj. Relative Risk (95% C.I.) ^b | p-Value | Covariate Remarks |
| 4 | 894 | 1.20 (1.06,1.35) | 0.003 | AGE (p=0.003) |
| 6° | 893 | 1.15 (1.02,1.29) | 0.021 | AGE (p=0.004) RACE (p=0.064) |

^a Model 4: Log₂ (lipid-adjusted current dioxin + 1).

Model 6: Log_2 (whole-weight current dioxin + 1), adjusted for log_2 total lipids.

^b Adjusted for percent body fat at time of duty in SEA, change in percent body fat from time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

^b Relative risk for a twofold increase in current dioxin.

^c Adjusted for log₂ total lipids in addition to covariates specified under "Covariate Remarks" column.

APPENDIX F-1.

Dependent Variable-Covariate Associations for the Neoplasia Assessment and Re-Analysis of Table 10-14

This appendix contains results of tests of association between each dependent variable and candidate covariates for the adjusted analysis. Pearson's chi-square test (continuity-adjusted for 2×2 tables) is used for significance testing of the associations between each discrete dependent variable and the candidate covariate. When a candidate covariate is continuous in nature (for example, age), the covariate is discretized prior to the analysis of the discrete dependent variable. Pearson's correlation coefficient is used for significance testing of the associations between the natural logarithm of prostate-specific antigen in its continuous form and a continuous candidate covariate. When a candidate covariate is discrete in nature, means transformed from the natural logarithm scale to the original scale are presented, and an analysis of variance is used to investigate the difference between the means on the natural logarithm scale.

Also included in this appendix is a re-analysis of Table 10-14, which showed results of the variable melanoma with a participant miscoded. After the analyses were well underway, an error in the classification of one participant's race was discovered. He was listed in the data base as Black, when he was actually non-Black. The participant was a 50-year-old enlisted flyer Comparison, with a current serum dioxin value <10 ppt. This participant had a melanoma and was excluded from the analyses of melanomas because he was erroneously coded as Black. Appendix Table F-1-2 shows results of additional analyses of melanomas performed with this participant properly coded as non-Black. These results did not indicate any change in conclusions based on this misclassification.

Table F-1-1.

Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | | Age | | Race | | | |
|---|------------|-----------------|-------------------|---------|---------|----------------|---------|--|
| Dependent | | Born Born | | | | | | |
| Variable | Level | ≥1942 | <1942 | p-Value | Black | Non-Black | p-Value | |
| Any Skin Neoplasm | | (n=881) | | - | | | | |
| | Yes | 25.3% | 32.8% | < 0.001 | | | | |
| Malignant Skin Neoplasm | | (n=881) | | | | | | |
| | Yes | 7.6% | 16.3% | < 0.001 | | | | |
| Benign Skin Neoplasm | ** | (n=951) | | 0.000 | | (n=2,084) | 0.000 | |
| | Yes | 18.5% | 18.5% | 0.999 | 18.5% | 18.5% | 0.999 | |
| Skin Neoplasm of Uncertain | Vac | (n=881) | | 0.027 | | | | |
| Behavior or Unspecified Nature | Yes | 0.5% | 0.6% | 0.927 | | | | |
| Any Basal Cell Carcinoma | | • | (n=1,203) | | | | | |
| | Yes | 6.0% | 14.1% | < 0.001 | | | | |
| Basal Cell Carcinoma on Eye, | | • | (n=1,203) | .0.004 | | | | |
| Ear, Face, Head, or Neck | Yes | 4.2% | 11.5% | < 0.001 | | | | |
| Basal Cell Carcinoma on | ** | • | (n=1,203) | 0.007 | | | | |
| Trunk | Yes | 1.9% | 4.2% | 0.007 | | | | |
| Basal Cell Carcinoma on | Yes | (n=881) 0.8% | (n=1,203) 2.5% | 0.006 | | | | |
| Upper Extremities Basal Cell Carcinoma on | 168 | (n=881) | | 0.000 | | | | |
| Lower Extremities | Yes | 0.1% | (n=1,203) 0.3% | 0.847 | | ~ - | | |
| Squamous Cell Carcinoma | 103 | (n=881) | | 0.017 | | | | |
| oquanous con caronioma | Yes | 0.8% | 1.6% | 0.163 | | | | |
| Nonmelanoma | | (n=881) | (n=1,203) | | | | | |
| | Yes | 6.7% | 15.6% | < 0.001 | | | | |
| Melanoma | | (n=881) | (n=1,203) | | | | | |
| | Yes | 1.0% | 1.0% | 0.999 | | | | |
| Any Systemic Neoplasm | | - | (n=1,269) | | | (n=2,093) | | |
| | Yes | 14.1% | 25.8% | < 0.001 | 21.5% | 20.7% | 0.904 | |
| Malignant Systemic Neoplasm | | | (n=1,269) | | | (n=2,093) | | |
| | Yes | 1.5% | 6.9% | < 0.001 | 3.9% | 4.6% | 0.841 | |
| Benign Systemic Neoplasm | 4 , | | (n=1,269) | -0.001 | | (n=2,093) | 0.657 | |
| | Yes | 12.0% | 18.9% | < 0.001 | 17.7% | 15.8% | 0.657 | |
| Systemic Neoplasm of | Voc | (n=954) | (n=1,269) | 0.142 | (n=130) | (n=2,093) | 0.639 | |
| Uncertain Behavior or Unspecified Nature | Yes | 1.2% | 2.1% | 0.142 | 0.8% | 1.7% | 0.039 | |
| Malignant Systemic Neoplasm | | (n=954) | (n=1,269) | | (n=130) | (n=2,093) | | |
| of Eye, Ear, Face, Head, or Neck | Yes | 0.3% | 1.3% | 0.021 | 0.8% | 0.9% | 0.999 | |
| Malignant Systemic Neoplasm | | (n=954) | (n=1,269) | | (n=130) | (n=2,093) | | |
| of Oral Cavity, Pharynx, or Larynx | Yes | 0.1% | 0.7% | 0.074 | 0.8% | 0.4% | 0.999 | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | Occupation | | | | | |
|---|-------|------------------|-------------------|------------------------|---------|--|--|
| Dependent Variable | Level | Officer | Enlisted Flyer | Enlisted Groundcrew | p-Value | | |
| Any Skin Neoplasm | Yes | (n=847) 33.4% | (n=337) 28.5% | (n=900) 26.4% | 0.005 | | |
| Malignant Skin Neoplasm | Yes | (n=847) 16.7% | (n=337) 13.4% | (n=900) 8.6% | <0.001 | | |
| Benign Skin Neoplasm | Yes | (n=860) 19.1% | (n=362) 16.0% | (n=992) 18.9% | 0.419 | | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=847) 0.6% | (n=337) 0.0% | (n=900) 0.7% | 0.336 | | |
| Any Basal Cell Carcinoma | Yes | (n=847) 13.8% | (n=337) 12.2% | (n=900) 7.1% | <0.001 | | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=847) 10.5% | (n=337) 10.1% | (n=900) 5.8% | 0.001 | | |
| Basal Cell Carcinoma on Trunk | Yes | (n=847) 5.1% | (n=337) 3.0% | (n=900) 1.6% | < 0.001 | | |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=847) 3.1% | (n=337) 0.6% | (n=900) 1.0% | 0.001 | | |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=847) 0.2% | (n=337) 0.0% | (n=900) 0.2% | 0.678 | | |
| Squamous Cell Carcinoma | Yes | (n=847) 1.8% | (n=337) 1.2% | (n=900) 0.8% | 0.173 | | |
| Nonmelanoma | Yes | (n=847) 15.6% | (n=337) 13.4% | (n=900) 7.8% | < 0.001 | | |
| Melanoma | Yes | (n=847) 1.3% | (n=337) 0.0% | (n=900) 1.1% | 0.120 | | |
| Any Systemic Neoplasm | Yes | (n=863) 22.3% | (n=363) 23.1% | (n=997) 18.6% | 0.069 | | |
| Malignant Systemic Neoplasm | Yes | (n=863) 6.3% | (n=363) 6.6% | (n=997) 2.4% | <0.001 | | |
| Benign Systemic Neoplasm | Yes | (n=863) 15.3% | (n=363) 18.2% | (n=997) 15.7% | 0.429 | | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=863) 2.4% | (n=363) 0.6% | (n=997) 1.4% | 0.043 | | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | Yes | (n=863) 0.9% | (n=363) 1.7% | (n=997) 0.6% | 0.191 | | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | Yes | (n=863) 0.4% | (n=363) 1.1% | (n=997) 0.3% | 0.126 | | |

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | | Skin Color ^a | | Hair Color | | | |
|--|-------|------------------|-------------------------|---------|---------------------------|--------------------|---------|--|
| Dependent Variable | Level | Non- Peach | Peach | p-Value | Black or Dark Brown | Other ^b | p-Value | |
| Any Skin Neoplasm | Yes | (n=433) 24.5% | (n=1,646) 30.9% | 0.011 | (n=1,427) 28.3% | (n=653) 32.3% | 0.071 | |
| Malignant Skin Neoplasm | Yes | (n=433) 9.7% | (n=1,646) 13.4% | 0.050 | (n=1,427) 11.7% | (n=653) 14.6% | 0.081 | |
| Benign Skin Neoplasm | Yes | (n=553) 16.8% | (n=1,655) 19.0% | 0.285 | (n=1,550) 18.2% | (n=659) 19.1% | 0.650 | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=433) 0.7% | (n=1,646) 0.5% | 0.876 | (n=1,427) 0.5% | (n=653) 0.6% | 0.976 | |
| Any Basal Cell Carcinoma | Yes | (n=433) 8.3% | (n=1,646) 11.3% | 0.089 | (n=1,427) 9.9% | (n=653) 12.4% | 0.098 | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=433) 6.9% | (n=1,646) 8.8% | 0.247 | (n=1,427) 7.3% | (n=653) 10.9% | 0.008 | |
| Basal Cell Carcinoma on Trunk | Yes | (n=433) 2.1% | (n=1,646) $3.5%$ | 0.173 | (n=1,427) 3.2% | (n=653) 3.4% | 0.901 | |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=433) 1.2% | (n=1,646) $1.9%$ | 0.367 | (n=1,427) 1.5% | (n=653) 2.3% | 0.303 | |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=433) 0.2% | (n=1,646) $0.2%$ | 0.999 | (n=1,427) 0.1% | (n=653) 0.3% | 0.792 | |
| Squamous Cell Carcinoma | Yes | (n=433) 0.7% | (n=1,646) $1.4%$ | 0.352 | (n=1,427) 1.1% | (n=653) 1.5% | 0.570 | |
| Nonmelanoma | Yes | (n=433) 8.8% | (n=1,646) 12.7% | 0.031 | (n=1,427) 10.9% | (n=653) 14.1% | 0.042 | |
| Melanoma | Yes | (n=433) 0.9% | (n=1,646) $1.0%$ | 0.999 | (n=1,427) 1.1% | (n=653) 0.8% | 0.706 | |
| Any Systemic Neoplasm | | | | | | | | |
| Malignant Systemic Neoplasm | | | | | | | | |
| Benign Systemic Neoplasm | | | | | | | | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | | | | | | | | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | | | | | | | | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | | | | | | | | |

Non-Peach = Dark, medium, or pale skin.
 Peach = Dark peach or pale peach skin.

^b Other = Bald, light brown, blonde, or red hair.

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | | Ey | e Color | | |
|--|-------|--|------------------|------------------|-------|--|
| Dependent Variable | Level | Hazel or I Brown Green Gray or Blue | | | | |
| Any Skin Neoplasm | Yes | (n=619) 27.0% | (n=562) 31.0% | (n=897) 30.4% | 0.242 | |
| Malignant Skin Neoplasm | Yes | (n=619) 10.8% | (n=562) 12.5% | (n=897) 13.8% | 0.222 | |
| Benign Skin Neoplasm | Yes | (n=742) 17.9% | (n=566) 20.0% | (n=898) 18.0% | 0.579 | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=619) 1.0% | (n=562) 0.5% | (n=897) 0.2% | 0.144 | |
| Any Basal Cell Carcinoma | Yes | (n=619) 8.9% | (n=562) 11.4% | (n=897) 11.5% | 0.224 | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=619) 7.3% | (n=562) 8.7% | (n=897) 9.0% | 0.458 | |
| Basal Cell Carcinoma on Trunk | Yes | (n=619) 2.3% | (n=562) 4.1% | (n=897) 3.3% | 0.198 | |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=619) 0.8% | (n=562) 2.5% | (n=897) 2.0% | 0.073 | |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=619) 0.2% | (n=562) 0.2% | (n=897) 0.2% | 0.961 | |
| Squamous Cell Carcinoma | Yes | (n=619) 0.8% | (n=562) 0.9% | (n=897) 1.8% | 0.162 | |
| Nonmelanoma | Yes | (n=619) 10.0% | (n=562) 12.1% | (n=897) 12.9% | 0.219 | |
| Melanoma | Yes | (n=619) 1.0% | (n=562) 0.7% | (n=897) 1.1% | 0.745 | |
| Any Systemic Neoplasm | | | | | | |
| Malignant Systemic Neoplasm | | | | | | |
| Benign Systemic Neoplasm | | | | | | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | | | | | | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | | | | | | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | | | | | | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)

Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | Skin Rea | ction to Sun | after at Least | 2 Hours Ex | cposure |
|---|-------|------------------|------------------|------------------|--------------------|---------|
| Dependent | Level | No Reaction | Becomes Red | Burns | Painfully Burns | p-Value |
| Any Skin Neoplasm | Yes | (n=800) 24.3% | (n=832) 32.8% | (n=301) 32.2% | (n=147) 35.4% | < 0.001 |
| Malignant Skin Neoplasm | Yes | (n=800) 7.6% | (n=832) 15.0% | (n=301) 16.3% | (n=147) 19.1% | < 0.001 |
| Benign Skin Neoplasm | Yes | (n=905) 17.6% | (n=846) 19.4% | (n=310) 18.1% | (n=148) 19.6% | 0.773 |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=800) 0.6% | (n=832) 0.5% | (n=301) 0.7% | (n=147) 0.0% | 0.786 |
| Any Basal Cell Carcinoma | Yes | (n=800) 5.6% | (n=832) 13.6% | (n=301) 13.6% | (n=147) 15.7% | < 0.001 |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=800) 4.3% | (n=832) 10.3% | (n=301) 11.0% | (n=147) 15.0% | < 0.001 |
| Basal Cell Carcinoma on Trunk | Yes | (n=800) 1.4% | (n=832) 4.5% | (n=301) 4.7% | (n=147) 3.4% | 0.002 |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=800) $0.9%$ | (n=832) 2.4% | (n=301) 2.0% | (n=147) 2.7% | 0.093 |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=800) 0.3% | (n=832) 0.2% | (n=301) 0.0% | (n=147) 0.0% | 0.777 |
| Squamous Cell Carcinoma | Yes | (n=800) 0.9% | (n=832) 1.2% | (n=301) 2.0% | (n=147) 2.0% | 0.389 |
| Nonmelanoma | Yes | (n=800) 6.8% | (n=832) 14.4% | (n=301) 15.6% | (n=147) 17.7% | < 0.001 |
| Melanoma | Yes | (n=800) 0.9% | (n=832) 0.7% | (n=301) 1.3% | (n=147) 2.7% | 0.141 |
| Any Systemic Neoplasm | | | | | | |
| Malignant Systemic Neoplasm | | | | | | |
| Benign Systemic Neoplasm | | | | | | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | | | | | | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | | | | | , | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | | | | | | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | Skin Reaction to Sun after Repeated Exposures | | | | | | | |
|---|-------|---|----------------------|------------------|---------------------|---------|--|--|--|
| Dependent _ Variable | Level | Deeply Tanned | Moderately Tanned | Mildly Tanned | Freckled- No Tan | p-Value | | | |
| Any Skin Neoplasm | Yes | (n=601) 25.5% | (n=1,070) 30.3% | (n=358) 33.2% | (n=44) 40.9% | 0.017 | | | |
| Malignant Skin Neoplasm | Yes | (n=601) 7.8% | (n=1,070) 13.1% | (n=358) 16.5% | (n=44) 36.4% | < 0.001 | | | |
| Benign Skin Neoplasm | Yes | (n=672) 17.9% | (n=1,112) 19.4% | (n=367) 18.5% | (n=46) 6.5% | 0.159 | | | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=601) 1.2% | (n=1,070) 0.1% | (n=358) 0.3% | (n=44) 2.3% | 0.006 | | | |
| Any Basal Cell Carcinoma | Yes | (n=601) 6.5% | (n=1,070) 10.9% | (n=358) 14.3% | (n=44) 31.8% | <0.001 | | | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=601) 5.5% | (n=1,070) 8.3% | (n=358) 10.6% | (n=44) 31.8% | <0.001 | | | |
| Basal Cell Carcinoma on Trunk | Yes | (n=601) 1.2% | (n=1,070) 3.7% | (n=358) 4.8% | (n=44) 6.8% | 0.004 | | | |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=601) 0.5% | (n=1,070) 2.0% | (n=358) 3.1% | (n=44) 4.6% | 0.011 | | | |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=601) 0.5% | (n=1,070) 0.0% | (n=358) 0.3% | (n=44) 0.0% | 0.156 | | | |
| Squamous Cell Carcinoma | Yes | (n=601) 0.5% | (n=1,070) 1.5% | (n=358) 1.4% | (n=44) 4.6% | 0.067 | | | |
| Nonmelanoma | Yes | (n=601) 7.2% | (n=1,070) 12.3% | (n=358) 15.6% | (n=44) 34.1% | < 0.001 | | | |
| Melanoma | Yes | (n=601) 0.7% | (n=1,070) 1.1% | (n=358) 1.1% | (n=44) 2.3% | 0.663 | | | |
| Any Systemic Neoplasm | | . | | ••• | | | | | |
| Malignant Systemic Neoplasm | | | | | | | | | |
| Benign Systemic Neoplasm | | | | | | | | | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | | | | | | | | | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | | | | | | | | | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | | | · | | | | | | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| D 14 | | Composite Sun Reaction Index ^c | | | | | |
|--|-------|---|------------------|------------------|---------|--|--|
| Dependent Variable | Level | Low | Medium | High | p-Value | | |
| Any Skin Neoplasm | Yes | (n=1,451) 28.5% | (n=461) 30.8% | (n=169) 36.7% | 0.071 | | |
| Malignant Skin Neoplasm | Yes | (n=1,451) 10.5% | (n=461) 15.8% | (n=169) 21.9% | < 0.001 | | |
| Benign Skin Neoplasm | Yes | (n=1,561) 19.0% | (n=477) 17.0% | (n=172) 18.0% | 0.594 | | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=1,451) 0.6% | (n=461) 0.2% | (n=169) 0.6% | 0.578 | | |
| Any Basal Cell Carcinoma | Yes | (n=1,451) 8.8% | (n=461) 13.5% | (n=169) 18.9% | < 0.001 | | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=1,451) 7.0% | (n=461) 9.3% | (n=169) 18.3% | < 0.001 | | |
| Basal Cell Carcinoma on Trunk | Yes | (n=1,451) 2.6% | (n=461) 5.2% | (n=169) 3.6% | 0.018 | | |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=1,451) 1.3% | (n=461) 2.8% | (n=169) 3.0% | 0.049 | | |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=1,451) 0.2% | (n=461) 0.2% | (n=169) 0.0% | 0.837 | | |
| Squamous Cell Carcinoma | Yes | (n=1,451) 1.0% | (n=461) 2.0% | (n=169) 1.8% | 0.204 | | |
| Nonmelanoma | Yes | (n=1,451) 9.8% | (n=461) 15.2% | (n=169) 20.7% | < 0.001 | | |
| Melanoma | Yes | (n=1,451) 0.8% | (n=461) 1.1% | (n=169) 2.4% | 0.163 | | |
| Any Systemic Neoplasm | | | | | | | |
| Malignant Systemic Neoplasm | | | | | | | |
| Benign Systemic Neoplasm | | | | | | | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | | | | | | | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | | | . | | | | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | | | | | | | |

^c Low = Painfully burns after at least 2 hours exposure or freckles with no tan after repeated exposures.

Medium = Burns after at least 2 hours exposure or mildly tans after repeated exposures.

High = All other reactions.

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Average | Lifetime Re Latitude | sidential | Asbestos Exposure | | | |
|--|-------|--------------------|-------------------------|-------------|--------------------|------------------|---------|--|
| Variable | Level | <37° | ≥37° | p-Value | No | Yes | p-Value | |
| Any Skin Neoplasm | Yes | (n=1,004) 31.7% | (n=1,058) 28.0% | 0.074 | (n=1,522) 29.7% | (n=562) 29.4% | 0.923 | |
| Malignant Skin Neoplasm | Yes | (n=1,004) 15.2% | (n=1,058) 10.3% | 0.001 | (n=1,522) 13.3% | (n=562) 10.7% | 0.121 | |
| Benign Skin Neoplasm | Yes | (n=1,083) 17.7% | (n=1,108) 19.3% | 0.368 | (n=1,602) 18.1% | (n=612) 19.4% | 0.505 | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=1,004) 0.7% | (n=1,058) 0.4% | 0.489 | (n=1,522) 0.4% | (n=562) 0.9% | 0.296 | |
| Any Basal Cell Carcinoma | Yes | (n=1,004) 13.5% | (n=1,058) 8.1% | < 0.001 | (n=1,522) 11.2% | (n=562) 9.3% | 0.238 | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=1,004) 10.9% | (n=1,058) 6.1% | <0.001 | (n=1,522) 8.6% | (n=562) 7.8% | 0.632 | |
| Basal Cell Carcinoma on Trunk | Yes | (n=1,004) 4.2% | (n=1,058) 2.3% | 0.019 | (n=1,522) 3.8% | (n=562) 1.8% | 0.034 | |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=1,004) 2.3% | (n=1,058) $1.3%$ | 0.137 | (n=1,522) 2.1% | (n=562) 0.9% | 0.094 | |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=1,004) 0.1% | (n=1,058) 0.3% | 0.654 | (n=1,522) 0.1% | (n=562) 0.4% | 0.635 | |
| Squamous Cell Carcinoma | Yes | (n=1,004) 1.7% | (n=1,058) 0.9% | 0.129 | (n=1,522) 1.5% | (n=562) 0.7% | 0.264 | |
| Nonmelanoma | Yes | (n=1,004) 14.9% | (n=1,058) 9.1% | <0.001 | (n=1,522) 12.6% | (n=562) 9.8% | 0.090 | |
| Melanoma | Yes | (n=1,004) 0.6% | (n=1,058) 1.4% | 0.102 | (n=1,522) 1.1% | (n=562) 0.9% | 0.936 | |
| Any Systemic Neoplasm | Yes | | | | (n=1,607) 20.9% | (n=616) 20.3% | 0.748 | |
| Malignant Systemic Neoplasm | Yes | | | | (n=1,607) 4.8% | (n=616) 4.1% | 0.531 | |
| Benign Systemic Neoplasm | Yes | | | | (n=1,607) 16.1% | (n=616) 15.6% | 0.836 | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | | | | (n=1,607) 1.7% | (n=616) 1.5% | 0.780 | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | Yes | . | | | (n=1,607) 0.9% | (n=616) 0.8% | 0.983 | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | Yes | | | | (n=1,607) 0.4% | (n=616) 0.5% | 0.999 | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Ionizing R | adiation E | xposure | Industrial Chemical Exposure | | |
|--|-------|---------------------|------------------|---------|------------------------------|--------------------|---------|
| Variable | Level | No | Yes | p-Value | No | Yes | p-Value |
| Any Skin Neoplasm | Yes | (n=1,588) 28.6% | (n=496) 32.9% | 0.078 | (n=868) 30.3% | (n=1,216) 29.1% | 0.591 |
| Malignant Skin Neoplasm | Yes | (n=1,588) $12.0%$ | (n=496) 14.5% | 0.168 | (n=868) 13.7% | (n=1,216) 11.8% | 0.231 |
| Benign Skin Neoplasm | Yes | (n=1,674) 17.9% | (n=540) 20.4% | 0.214 | (n=915) 18.8% | (n=1,299) 18.2% | 0.784 |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=1,588) 0.6% | (n=496) 0.4% | 0.933 | (n=868) 0.5% | (n=1,216) 0.6% | 0.960 |
| Any Basal Cell Carcinoma | Yes | (n=1,588) 10.1% | (n=496) 12.5% | 0.149 | (n=868) 11.5% | (n=1,216) 10.0% | 0.311 |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=1,588) 7.9% | (n=496) 10.1% | 0.145 | (n=868) 9.1% | (n=1,216) 7.9% | 0.369 |
| Basal Cell Carcinoma on Trunk | Yes | (n=1,588) 3.1% | (n=496) 3.6% | 0.650 | (n=868) 3.9% | (n=1,216) 2.7% | 0.159 |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=1,588) · 1.8% | (n=496) 1.6% | 0.905 | (n=868) 2.0% | (n=1,216) 1.6% | 0.714 |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=1,588) $0.3%$ | (n=496) 0.0% | 0.595 | (n=868) 0.0% | (n=1,216) 0.3% | 0.237 |
| Squamous Cell Carcinoma | Yes | (n=1,588) 1.1% | (n=496) 1.6% | 0.543 | (n=868) 1.6% | (n=1,216) 1.0% | 0.285 |
| Nonmelanoma | Yes | (n=1,588) 11.3% | (n=496) 13.7% | 0.166 | (n=868) 13.3% | (n=1,216) 10.9% | 0.110 |
| Melanoma | Yes | (n=1,588) $1.0%$ | (n=496) 1.0% | 0.999 | (n=868) 0.6% | (n=1,216) $1.3%$ | 0.149 |
| Any Systemic Neoplasm | Yes | (n=1,677) 20.6% | (n=546) 21.1% | 0.877 | (n=918) 23.9% | (n=1,305) 18.5% | 0.003 |
| Malignant Systemic Neoplasm | Yes | (n=1,677) 4.2% | (n=546) 5.7% | 0.200 | (n=918) 5.8% | (n=1,305) 3.8% | 0.033 |
| Benign Systemic Neoplasm | Yes | (n=1,677) 16.2% | (n=546) 15.2% | 0.642 | , | (n=1,305) 14.3% | 0.012 |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=1,677) 1.6% | (n=546) 2.0% | 0.586 | (n=918) 2.0% | (n=1,305) 1.5% | 0.455 |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | Yes | (n=1,677) 0.8% | (n=546) 1.1% | 0.759 | (n=918) 1.1% | (n=1,305) 0.8% | 0.571 |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | Yes | (n=1,677) 0.3% | (n=546) 0.9% | 0.132 | (n=918) 0.5% | (n=1,305) 0.4% | 0.812 |

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Herbicide Exposure | | | Insecticide Exposure | | |
|---|-------|--------------------|--------------------|---------|----------------------|--------------------|---------|
| Variable | Level | No | Yes | p-Value | No | Yes | p-Value |
| Any Skin Neoplasm | Yes | (n=786) 27.5% | (n=1,298) 30.9% | 0.109 | (n=650) 28.5% | (n=1,434) 30.1% | 0.472 |
| Malignant Skin Neoplasm | Yes | (n=786) 11.5% | (n=1,298) 13.3% | 0.237 | (n=650) 11.5% | (n=1,434) 13.1% | 0.352 |
| Benign Skin Neoplasm | Yes | (n=838) 17.5% | (n=1,376) 19.0% | 0.409 | (n=700) 18.3% | (n=1,514) 18.6% | 0.924 |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=786) 0.6% | (n=1,298) 0.5% | 0.827 | (n=650) 0.6% | (n=1,434) 0.5% | 0.964 |
| Any Basal Cell Carcinoma | Yes | (n=786) 9.2% | (n=1,298) 11.6% | 0.100 | (n=650) 9.1% | (n=1,434) 11.4% | 0.135 |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=786) 7.4% | (n=1,298) 9.0% | 0.221 | (n=650) 7.4% | (n=1,434) 8.9% | 0.300 |
| Basal Cell Carcinoma on Trunk | Yes | (n=786) 2.4% | (n=1,298) 3.7% | 0.139 | (n=650) 2.8% | (n=1,434) 3.4% | 0.520 |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=786) 1.7% | (n=1,298) 1.9% | 0.876 | (n=650) 1.5% | (n=1,434) 1.9% | 0.710 |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=786) 0.3% | (n=1,298) 0.2% | 0.999 | (n=650) 0.0% | (n=1,434) 0.3% | 0.419 |
| Squamous Cell Carcinoma | Yes | (n=786) 1.5% | (n=1,298) 1.1% | 0.490 | (n=650) 1.7% | (n=1,434) 1.1% | 0.308 |
| Nonmelanoma | Yes | (n=786) 10.8% | (n=1,298) 12.5% | 0.284 | (n=650) 10.8% | (n=1,434) 12.3% | 0.339 |
| Melanoma | Yes | (n=786) 0.8% | (n=1,298) 1.2% | 0.520 | (n=650) 1.1% | (n=1,434) 1.0% | 0.999 |
| Any Systemic Neoplasm | Yes | (n=839) 19.3% | (n=1,384) 21.6% | 0.215 | (n=701) 20.8% | (n=1,522) 20.7% | 0.988 |
| Malignant Systemic Neoplasm | Yes | (n=839) 4.4% | (n=1,384) 4.7% | 0.835 | (n=701) 4.9% | (n=1,522) 4.5% | 0.771 |
| Benign Systemic Neoplasm | Yes | (n=839) 14.5% | (n=1,384) 16.8% | 0.184 | (n=701) 15.8% | (n=1,522) 16.0% | 0.987 |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=839) 1.3% | (n=1,384) 1.9% | 0.399 | (n=701) 1.7% | (n=1,522) 1.6% | 0.999 |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | Yes | (n=839) 0.7% | (n=1,384) 1.0% | 0.627 | (n=701) 0.9% | (n=1,522) 0.9% | 0.999 |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | Yes | (n=839) 0.4% | (n=1,384) 0.5% | 0.858 | (n=701) 0.4% | (n=1,522) 0.5% | 0.999 |

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Degreasing Chemical Exposure | | | | | |
|---|-------|------------------------------|--------------------|---------|--|--|--|
| Variable | Level | No | Yes | p-Value | | | |
| Any Skin Neoplasm | Yes | (n=770) 30.9% | (n=1,314) 28.8% | 0.343 | | | |
| Malignant Skin Neoplasm | Yes | (n=770) 14.4% | (n=1,314) 11.6% | 0.069 | | | |
| Benign Skin Neoplasm | Yes | (n=820) 18.4% | (n=1,394) 18.5% | 0.999 | | | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=770) 0.4% | (n=1,314) 0.6% | 0.724 | | | |
| Any Basal Cell Carcinoma | Yes | (n=770) 11.6% | (n=1,314) 10.1% | 0.341 | | | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | Yes | (n=770) 9.0% | (n=1,314) 8.1% | 0.530 | | | |
| Basal Cell Carcinoma on Trunk | Yes | (n=770) 3.9% | (n=1,314) 2.8% | 0.222 | | | |
| Basal Cell Carcinoma on Upper Extremities | Yes | (n=770) 2.0% | (n=1,314) 1.7% | 0.776 | | | |
| Basal Cell Carcinoma on Lower Extremities | Yes | (n=770) 0.1% | (n=1,314) 0.2% | 0.999 | | | |
| Squamous Cell Carcinoma | Yes | (n=770) 1.7% | (n=1,314) 1.0% | 0.237 | | | |
| Nonmelanoma | Yes | (n=770) 13.4% | (n=1,314) 11.0% | 0.115 | | | |
| Melanoma | Yes | (n=770) 1.3% | (n=1,314) 0.8% | 0.429 | | | |
| Any Systemic Neoplasm | Yes | (n=822) 22.0% | (n=1,401) 20.0% | 0.277 | | | |
| Malignant Systemic Neoplasm | Yes | (n=822) 5.4% | (n=1,401) 4.1% | 0.255 | | | |
| Benign Systemic Neoplasm | Yes | (n=822) 16.3% | (n=1,401) 15.7% | 0.755 | | | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=822) 2.2% | (n=1,401) 1.4% | 0.190 | | | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | Yes | (n=822) 1.1% | (n=1,401) 0.8% | 0.607 | | | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | Yes | (n=822) 0.5% | (n=1,401) 0.4% | 0.999 | | | |

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Lifetime Cigarette Smoking History (Pack-ye | | | | | |
|--|-------|---|------------------|------------------|---------------|--|--|
| Variable | Level | 0 | >0-10 | >10 | p-Value | | |
| Any Skin Neoplasm | | | ** | | | | |
| Malignant Skin Neoplasm | | | | | | | |
| Benign Skin Neoplasm | | | | | | | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | | **** | | | | | |
| Any Basal Cell Carcinoma | | | , | | - 414 | | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | | | | | | | |
| Basal Cell Carcinoma on Trunk | | | | | | | |
| Basal Cell Carcinoma on Upper Extremities | | # | | | | | |
| Basal Cell Carcinoma on Lower Extremities | | | | <u></u> | | | |
| Squamous Cell Carcinoma | | | | | , | | |
| Nonmelanoma | | | | | *** | | |
| Melanoma | | ~- | | | | | |
| Any Systemic Neoplasm | Yes | (n=608) 19.7% | (n=680) 18.1% | (n=932) 23.3% | 0.031 | | |
| Malignant Systemic Neoplasm | Yes | (n=608) 4.3% | (n=680) 2.7% | (n=932) 6.2% | 0.003 | | |
| Benign Systemic Neoplasm | Yes | (n=608) 15.6% | (n=680) 15.4% | (n=932) 16.5% | 0.815 | | |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=608) 1.2% | (n=680) 1.5% | (n=932) 2.0% | 0.376 | | |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | Yes | (n=608) 0.7% | (n=680) 0.4% | (n=932) 1.4% | 0.102 | | |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | Yes | (n=608) 0.3% | (n=680) 0.2% | (n=932) 0.8% | 0.176 | | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Li | fetime Alcohol H | listory (Drink-y | ears) |
|---|-------|------------------|--------------------|------------------|---------|
| Variable | Level | 0 | >0-40 | >40 | p-Value |
| Any Skin Neoplasm | | | | | |
| Malignant Skin Neoplasm | | | | | |
| Benign Skin Neoplasm | | | | | |
| Skin Neoplasm of Uncertain Behavior or Unspecified Nature | | **** | | | |
| Any Basal Cell Carcinoma | | | | | |
| Basal Cell Carcinoma on Eye, Ear, Face, Head, or Neck | | | | | |
| Basal Cell Carcinoma on Trunk | | | | | |
| Basal Cell Carcinoma on Upper Extremities | | | | | |
| Basal Cell Carcinoma on Lower Extremities | | | *** | | |
| Squamous Cell Carcinoma | | | | | * |
| Nonmelanoma | | | | | |
| Melanoma | | | | | |
| Any Systemic Neoplasm | Yes | (n=134) 20.2% | (n=1,487) 19.9% | (n=560) 21.4% | 0.746 |
| Malignant Systemic Neoplasm | Yes | (n=134) 2.2% | (n=1,487) 4.3% | (n=560) 5.5% | 0.209 |
| Benign Systemic Neoplasm | Yes | (n=134) 19.4% | (n=1,487) 15.1% | (n=560) 16.1% | 0.405 |
| Systemic Neoplasm of Uncertain Behavior or Unspecified Nature | Yes | (n=134) 0.0% | (n=1,487) 1.8% | (n=560) 1.6% | 0.304 |
| Malignant Systemic Neoplasm of Eye, Ear, Face, Head, or Neck | Yes | (n=134) 1.5% | (n=1,487) 0.8% | (n=560) 1.1% | 0.659 |
| Malignant Systemic Neoplasm of Oral Cavity, Pharynx, or Larynx | Yes | (n=134) 0.8% | (n=1,487) 0.3% | (n=560) 0.7% | 0.465 |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued) Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | | Age | | Race | | |
|--|--------------|-----------------|-------------------|---------|-----------------|---------------------------|------------------|
| Dependent | | Born | Born | | - | | |
| Variable - | Level | ≥1942 | <1942 | p-Value | Black | Non-Black | p-Value |
| Malignant Systemic Neoplasm | | (n=954) | (n=1,269) |) | (n=130) | (n=2,093) | 20 .7 |
| of Esophagus | Yes | 0.0% | 0.1% | 0.999 | 0.0% | 0.1% | 0.999 |
| Malignant Systemic Neoplasm | | (n=954) | | | (n=130) | (n=2,093) | |
| of Brain | Yes | 0.0% | 0.2% | 0.609 | 0.0% | 0.1% | 0.999 |
| Malignant Systemic Neoplasm | | (n=954) | . , , | | (n=130) | . , , | |
| of Thymus, Heart, or Mediastinum | Yes | 0.2% | 0.0% | 0.359 | 0.0% | 0.1% | 0.999 |
| Malignant Systemic Neoplasm | | (n=954) | | | (n=130) | (n=2,093) | |
| of Thyroid Gland | Yes | 0.0% | 0.3% | 0.219 | 0.0% | 0.2% | 0.999 |
| Malignant Systemic Neoplasm | | (n=954) | ` , , | | (n=130) | (n=2,093) | |
| of Bronchus or Lung | Yes | 0.1% | 0.7% | 0.074 | 0.0% | 0.5% | 0.909 |
| Malignant Systemic Neoplasm | | (n=954) | | | (n=130) | | |
| of Colon or Rectum | Yes | 0.3% | 0.5% | 0.807 | 0.0% | 0.4% | 0.970 |
| Malignant Systemic Neoplasm | 3.7 | (n=954) | | | (n=130) | | |
| of Kidney or Bladder | Yes | 0.2% | 0.7% | 0.175 | 0.8% | 0.5% | 0.999 |
| Malignant Systemic Neoplasm | Vac | (n=954) | | | | (n=2,093) | 0.000 |
| of Prostate | Yes | 0.1% | 3.0% | < 0.001 | 2.3% | 1.7% | 0.880 |
| Malignant Systemic Neoplasm of Testicles | Yes | (n=954) 0.0% | (n=1,269) 0.2% | 0.358 | (n=130) 0.0% | (n=2,093) | 0.999 |
| Malignant Systemic Neoplasm | 165 | (n=954) | | | | 0.1% (n=2,093) | 0.999 |
| of Ill-Defined Sites | Yes | 0.0% | 0.3% | 0.219 | 0.0% | 0.2% | 0.999 |
| Malignant Systemic Neoplasm | 105 | (n=954) | | | | (n=2,093) | 0.777 |
| of Connective and Other Soft Tissues | Yes | 0.1% | 0.1% | 0.999 | 0.0% | 0.1% | 0.999 |
| Carcinoma in Situ of the | | (n=954) | (n=1,269) | | (n = 130) | (n=2,093) | |
| Penis, Other, and Unspecified Sites | Yes | 0.1% | 0.1% | 0.999 | 0.0% | 0.1% | 0.999 |
| Hodgkin's Disease | | (n=954) | (n=1,269) | | (n=130) | (n=2,093) | |
| | Yes | 0.0% | 0.2% | 0.609 | 0.0% | 0.1% | 0.999 |
| Leukemia | | (n=954) | | | | (n=2,093) | |
| | Yes | 0.1% | 0.1% | 0.999 | 0.0% | 0.1% | 0.999 |
| Non-Hodgkin's Lymphoma | | (n=954) | (n=1,269) | | (n=130) | (n=2,093) | |
| | Yes | 0.1% | 0.3% | 0.559 | 0.0% | 0.2% | 0.999 |
| Other Malignant Systemic | | (n=954) | | | (n=130) | , , , | |
| Neoplasms of Lymphoid and Histiocytic Tissue | Yes | 0.0% | 0.2% | 0.609 | 0.0% | 0.1% | 0.999 |
| Multiple Myeloma | | (n=954) | (n=1,269) | | (n=130) | (n=2,093) | |
| | Yes | 0.1% | 0.0% | 0.886 | 0.0% | 0.1% | 0.999 |
| Any Skin or Systemic | | (n=949) | (n=1,255) | | (n=129) | (n=2,075) | |
| Neoplasm | Yes | 35.0% | 48.8% | < 0.001 | 34.9% | 43.4% | 0.072 |
| Prostate-Specific Antigen | | | 2,163) | | (n=128) | $(\underline{n} = 2,034)$ | |
| (continuous - ng/ml) ^d | ASL | | 0.299 | < 0.001 | x = 1.094 | x = 1.015 | 0.336 |
| (discrete) | BSL | (n=953) 2.1% | (n=1,269) 3.2% | 0.166 | (n=130) | (n=2,092) | 0 572 |
| (discrete) | Abnormal | 1.1% | 6.8% | < 0.100 | 1.5% 9.2% | 2.8% 4.0% | 0.573 0.009 |
| (argerere) | 1 TOHOT HIAI | 1.1/0 | 0.070 | ~U.UU1 | 7.4 /0 | 7.0/0 | 0.009 |

^d Analysis based on natural logarithm of prostate-specific antigen for measurements at or above sensitivity level; means transformed from natural logarithm of prostate-specific antigen scale.

Note: ASL - At or above sensitivity limit. BSL - Below sensitivity limit.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | | Oce | | |
|-------------------------------------|----------|---------------------------------|---------------------------------|---------------------------------|---------|
| Dependent Variable | Level | Officer | Enlisted Flyer | Enlisted Groundcrew | p-Value |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Esophagus | Yes | 0.0% | 0.3% | 0.0% | 0.077 |
| Malignant Systemic Neoplasm | 103 | (n=863) | (n=363) | (n=997) | |
| of Brain | Yes | 0.1% | 0.3% | 0.0% | 0.309 |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Thymus, Heart, or | Yes | 0.1% | 0.0% | 0.1% | 0.817 |
| Mediastinum | | | | | |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Thyroid Gland | Yes | 0.4% | 0.0% | 0.1% | 0.308 |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Bronchus or Lung | Yes | 0.6% | 0.8% | 0.2% | 0.240 |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Colon or Rectum | Yes | 0.7% | 0.6% | 0.1% | 0.117 |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Kidney or Bladder | Yes | 0.9% | 0.3% | 0.2% | 0.068 |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Prostate | Yes | 2.9% | 2.7% | 0.6% | 0.001 |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Testicles | Yes | 0.1% | 0.3% | 0.1% | 0.725 |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Ill-Defined Sites | Yes | 0.2% | 0.3% | 0.1% | 0.717 |
| Malignant Systemic Neoplasm | | (n=863) | (n=363) | (n=997) | |
| of Connective and Other Soft | Yes | 0.1% | 0.0% | 0.1% | 0.817 |
| Tissues . | | | | | |
| Carcinoma in Situ of the | | (n=863) | (n=363) | (n=997) | 0.817 |
| Penis, Other, and Unspecified Sites | Yes | 0.1% | 0.0% | 0.1% | |
| Hodgkin's Disease | | (n=863) | (n=363) | (n=997) | |
| | Yes | 0.2% | 0.0% | 0.0% | 0.207 |
| Leukemia | | (n=863) | (n=363) | (n=997) | |
| | Yes | 0.0% | 0.3% | 0.1% | 0.336 |
| Non-Hodgkin's Lymphoma | | (n=863) | (n=363) | (n=997) | |
| · · | Yes | 0.4% | 0.3% | 0.1% | 0.519 |
| Other Malignant Systemic | | (n=863) | (n=363) | (n=997) | 0.015 |
| Neoplasms of Lymphoid and | Yes | 0.1% | 0.0% | 0.1% | 0.817 |
| Histiocytic Tissue | | (m. 000) | (m = 262) | (n=007) | |
| Multiple Myeloma | Var | (n=863) | (n=363) 0.0% | (n=997) 0.1% | 0.541 |
| | Yes | 0.0% | | (n=990) | 0.541 |
| Any Skin or Systemic | Voc | (n=854) 47.1% | (n=360) 45.3% | 38.4% | 0.001 |
| Neoplasm | Yes | | | (n=973) | 0.001 |
| Prostate-Specific Antigen | A CT | $\frac{(n=834)}{\bar{x}=1.123}$ | $\frac{(n=355)}{\bar{x}=1.121}$ | $\frac{(n=973)}{\bar{x}=0.901}$ | < 0.001 |
| (continuous - ng/ml) ^d | ASL | (n=863) | (n=362) | (n=997) | |
| (discrete) | BSL | $\frac{(1-803)}{3.4\%}$ | 1.9% | 2.4% | 0.277 |
| (discrete) | Abnormal | 5.5% | 6.1% | 2.1% | 0.003 |

^d Analysis based on natural logarithm of prostate-specific antigen for measurements at or above sensitivity level; means transformed from natural logarithm of prostate-specific antigen scale.

Note: ASL - At or above sensitivity limit.

BSL - Below sensitivity limit.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | | Skin Color | Ha | Hair Color | | |
|---|-------|------------------|--------------------|-------------|--------------------|--------------------|-------------|
| Dependent | | Non- | | | Black or | | |
| Variable | Level | Peach | Peach | p-Value | Dark Brown | Other ^b | p-Value |
| Malignant Systemic Neoplasm of Esophagus | | | | | | | |
| Malignant Systemic Neoplasm of Brain | | | | . | | | |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | | | | | | | |
| Malignant Systemic Neoplasm of Thyroid Gland | | | | | | | |
| Malignant Systemic Neoplasm of Bronchus or Lung | | | | | | | |
| Malignant Systemic Neoplasm of Colon or Rectum | | | | | | | |
| Malignant Systemic Neoplasm of Kidney or Bladder | | | | | | | |
| Malignant Systemic Neoplasm of Prostate | | | | | | | |
| Malignant Systemic Neoplasm of Testicles | | | | | | | |
| Malignant Systemic Neoplasm of Ill-Defined Sites | | | | | | | 7- |
| Malignant Systemic Neoplasm of Connective and Other Soft Tissues | | ** | | | | | |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | | | | | | | |
| Hodgkin's Disease | | | | | | | |
| Leukemia | | | | | | | |
| Non-Hodgkin's Lymphoma | | | | | | | |
| Other Malignant Systemic Neoplasms of Lymphoid and Histiocytic Tissue | | | | | | | |
| Multiple Myeloma | | | | | | | |
| Any Skin or Systemic Neoplasm | Yes | (n=551) 37.0% | (n=1,647) 44.7% | 0.002 | (n=1,545) 41.6% | (n=654) 45.7% | 0.079 |
| Prostate-Specific Antigen | | | | | | | |
| (continuous - ng/ml) | | | | | | | |
| (discrete) (discrete) | | | | | | | |

Non-Peach = Dark, medium, or pale skin.
 Peach = Dark peach or pale peach skin.

^b Other = Bald, light brown, blonde, or red hair.

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | | Eye Color | | | | | | |
|---|-------|------------------|------------------|------------------|---------|--|--|--|--|
| Dependent _ | | | | | | | | | |
| Variable | Level | Brown | Green | Gray or Blue | p-Value | | | | |
| Malignant Systemic Neoplasm of Esophagus | | | | | | | | | |
| Malignant Systemic Neoplasm of Brain | | | | | | | | | |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | | | | | | | | | |
| Malignant Systemic Neoplasm of Thyroid Gland | | | | | ** | | | | |
| Malignant Systemic Neoplasm of Bronchus or Lung | | | | | | | | | |
| Malignant Systemic Neoplasm of Colon or Rectum | | | | | | | | | |
| Malignant Systemic Neoplasm of Kidney or Bladder | | · | | | | | | | |
| Malignant Systemic Neoplasm of Prostate | | | | | | | | | |
| Malignant Systemic Neoplasm of Testicles | | | | | | | | | |
| Malignant Systemic Neoplasm of Ill-Defined Sites | | | | | | | | | |
| Malignant Systemic Neoplasm of Connective and Other Soft Fissues | | | | | | | | | |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | | | | | · | | | | |
| Hodgkin's Disease | | | · | • | | | | | |
| Leukemia | | | | · | · | | | | |
| Non-Hodgkin's Lymphoma | | ** | | | | | | | |
| Other Malignant Systemic Neoplasms of Lymphoid and Histiocytic Tissue | | | | - | | | | | |
| Multiple Myeloma | | | | | | | | | |
| Any Skin or Systemic Neoplasm | Yes | (n=740) 38.0% | (n=564) 46.1% | (n=892) 44.6% | 0.005 | | | | |
| Prostate-Specific Antigen | | | | | | | | | |
| (continuous - ng/ml) | | | | | | | | | |
| (discrete) (discrete) | | | | | | | | | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | Skin Reaction to Sun after at Least 2 Hours Exposure | | | | | | | |
|---|-------|--|------------------|------------------|------------------|---------|--|--|--|
| Dependent | | No | Becomes | | Painfully | _ | | | |
| Variable | Level | Reaction | Red | Burns | Burns | p-Value | | | |
| Malignant Systemic Neoplasm of Esophagus | | | | | | | | | |
| Malignant Systemic Neoplasm of Brain | | | | | | | | | |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | | | | | | | | | |
| Malignant Systemic Neoplasm of Thyroid Gland | | | | | <u>-</u> - | | | | |
| Malignant Systemic Neoplasm of Bronchus or Lung | | | | · | | | | | |
| Malignant Systemic Neoplasm of Colon or Rectum | | | *** | | | | | | |
| Malignant Systemic Neoplasm of Kidney or Bladder | | | | | | | | | |
| Malignant Systemic Neoplasm of Prostate | | | | | | | | | |
| Malignant Systemic Neoplasm of Testicles | | | · | | <u></u> · | | | | |
| Malignant Systemic Neoplasm of Ill-Defined Sites | | | | | | | | | |
| Malignant Systemic Neoplasm of Connective and Other Soft Tissues | | | | | | | | | |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | | | | | | | | | |
| Hodgkin's Disease | | | | | | | | | |
| Leukemia | | | | | | | | | |
| Non-Hodgkin's Lymphoma | | | | | | | | | |
| Other Malignant Systemic Neoplasms of Lymphoid and Histiocytic Tissue | λ. | | | | | | | | |
| Multiple Myeloma | | | | | | | | | |
| Any Skin or Systemic Neoplasm | Yes | (n=902) 39.9% | (n=842) 44.5% | (n=308) 43.2% | (n=147) 50.0% | 0.073 | | | |
| Prostate-Specific Antigen | | | | | | | | | |
| (continuous - ng/ml) | | | | | | *** | | | |
| (discrete) (discrete) | | | | ~~ | | | | | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| | | Skin Reaction to Sun after Repeated Exposures | | | | | | | | |
|---|-------|---|----------------------|------------------|---------------------|-------------|--|--|--|--|
| Dependent | Level | Deeply Tanned | Moderately Tanned | Mildly Tanned | Freckled- No Tan | p-Value | | | | |
| Variable | Levei | | Tamieu | Tauneu | | | | | | |
| Malignant Systemic Neoplasm of Esophagus | | *** | | | | | | | | |
| Malignant Systemic Neoplasm of Brain | | | | | | | | | | |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | | ' | | | | | | | | |
| Malignant Systemic Neoplasm of Thyroid Gland | | | | | | | | | | |
| Malignant Systemic Neoplasm of Bronchus or Lung | | | | | <u></u> | | | | | |
| Malignant Systemic Neoplasm of Colon or Rectum | | | | | | | | | | |
| Malignant Systemic Neoplasm of Kidney or Bladder | | | | | | | | | | |
| Malignant Systemic Neoplasm of Prostate | | | | | | | | | | |
| Malignant Systemic Neoplasm of Testicles | | | | | | | | | | |
| Malignant Systemic Neoplasm of Ill-Defined Sites | | | | | | | | | | |
| Malignant Systemic Neoplasm of Connective and Other Soft Tissues | | | | | | | | | | |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | | | | | | | | | | |
| Hodgkin's Disease | | | | | | | | | | |
| Leukemia | | | | | | | | | | |
| Non-Hodgkin's Lymphoma | | | | ' | | | | | | |
| Other Malignant Systemic Neoplasms of Lymphoid and Histiocytic Tissue | | | | | | | | | | |
| Multiple Myeloma | | | | | | | | | | |
| Any Skin or Systemic Neoplasm | Yes | (n=667) 38.8% | (n=1,109) 43.6% | (n=365) 46.3% | (n=46) 45.7% | 0.089 | | | | |
| Prostate-Specific Antigen | | | | | | | | | | |
| (continuous - ng/ml) | | | | | | | | | | |
| (discrete) | | | | | | | | | | |
| (discrete) | | | | | | | | | | |

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Composite Sun Reaction Index ^c | | | | | | |
|---|-------|---|------------------|------------------|-------------|--|--|--|
| Variable | Level | Low | Medium | High | p-Value | | | |
| Malignant Systemic Neoplasm of Esophagus | | | | | | | | |
| Malignant Systemic Neoplasm of Brain | | | | | | | | |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | | | | | | | | |
| Malignant Systemic Neoplasm of Thyroid Gland | | | . | | | | | |
| Malignant Systemic Neoplasm of Bronchus or Lung | | | | | | | | |
| Malignant Systemic Neoplasm of Colon or Rectum | | | | ~~ | | | | |
| Malignant Systemic Neoplasm of Kidney or Bladder | | , | | | | | | |
| Malignant Systemic Neoplasm of Prostate | | | | | | | | |
| Malignant Systemic Neoplasm of Testicles | | | | | | | | |
| Malignant Systemic Neoplasm of Ill-Defined Sites | | | | . | | | | |
| Malignant Systemic Neoplasm of Connective and Other Soft Tissues | | . | | | | | | |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | | | | * | | | | |
| Hodgkin's Disease | | | | | | | | |
| eukemia | | | | | | | | |
| Non-Hodgkin's Lymphoma | | | | | | | | |
| Other Malignant Systemic Neoplasms of Lymphoid and Histiocytic Tissue | | | | ••• · | | | | |
| Multiple Myeloma | | | | | | | | |
| Any Skin or Systemic Neoplasm | Yes | (n=1,554) 42.1% | (n=475) 43.2% | (n=171) 48.5% | 0.266 | | | |
| Prostate-Specific Antigen | | | | | | | | |
| (continuous - ng/ml) | | | | | | | | |
| (discrete) | • | | | *** | | | | |
| (discrete) | | | | | | | | |

Low = Painfully burns after at least 2 hours exposure or freckles with no tan after repeated exposures.
 Medium = Burns after at least 2 hours exposure or mildly tans after repeated exposures.
 High = All other reactions.

^{--:} Covariate not applicable for dependent variable.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Average | Lifetime Re Latitude | sidential | Asbe | stos Expos | ure |
|--|-----------------|--------------------|-------------------------|------------|--|--|----------------|
| Variable | Level | <37° | ≥37° | p-Value | No | Yes | p-Value |
| Malignant Systemic Neoplasm of Esophagus | Yes | | | | (n=1,607) 0.0% | (n=616) 0.2% | 0.618 |
| Malignant Systemic Neoplasm of Brain | Yes | | | | (n=1,607) 0.1% | (n=616) 0.0% | 0.932 |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | Yes | | | | (n=1,607) 0.1% | (n=616) 0.2% | 0.999 |
| Malignant Systemic Neoplasm of Thyroid Gland | Yes | | | | (n=1,607) $0.3%$ | (n=616) 0.0% | 0.496 |
| Malignant Systemic Neoplasm of Bronchus or Lung | Yes | | | | (n=1,607) 0.4% | (n=616) 0.5% | 0.999 |
| Malignant Systemic Neoplasm of Colon or Rectum | Yes | | | | (n=1,607) 0.4% | (n=616) 0.5% | 0.996 |
| Malignant Systemic Neoplasm of Kidney or Bladder | Yes | | | | (n=1,607) 0.6% | (n=616) 0.3% | 0.711 |
| Malignant Systemic Neoplasm of Prostate | Yes | | = 0 | | (n=1,607) 2.0% | (n=616) 1.1% | 0.233 |
| Malignant Systemic Neoplasm of Testicles | Yes | | | | (n=1,607) 0.1% | (n=616) 0.2% | 0.999 |
| Malignant Systemic Neoplasm of Ill-Defined Sites | Yes | | | - - | (n=1,607) 0.0% | (n=616) 0.2% | 0.999 |
| Malignant Systemic Neoplasm of Connective and Other Soft Tissues | Yes | | w ** | | (n=1,607) 0.1% | (n=616) 0.2% | 0.999 |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | Yes | | | | (n=1,607) 0.1% | (n=616) 0.2% | 0.999 |
| Hodgkin's Disease | Yes | | | | (n=1,607) 0.1% | (n=616) 0.0% | 0.932 |
| Leukemia | Yes | | | ** | (n=1,607) 0.1% | (n=616) 0.0% | 0.932 |
| Non-Hodgkin's Lymphoma | Yes | | | | (n=1,607) 0.3% | (n=616) 0.2% | 0.999 |
| Other Malignant Systemic Neoplasms of Lymphoid and Histocytic Tissue | Yes | | | | (n=1,607) 0.1% | (n=616) 0.0% | 0.932 |
| Multiple Myeloma | Yes | | | | (n=1,607) 0.0% | (n=616) 0.2% | 0.999 |
| Any Skin or Systemic Neoplasm | Yes | (n=1,077) 44.5% | (n=1,104) 41.5% | 0.172 | (n=1,592) 42.9% | (n=612) 42.8% | 0.999 |
| Prostate-Specific Antigen (continuous - ng/ml) ^d | ASL | | | | $\frac{(n=1,558)}{x=1.021}$ (n=1,606) | $\frac{(n=604)}{\bar{x}=1.017}$ (n=616) | 0.928 |
| (discrete) (discrete) | BSL Abnormal | | | | 3.0% 4.4% | 2.0% 4.1% | 0.227 0.795 |

^d Analysis based on natural logarithm of prostate-specific antigen for measurements at or above sensitivity level; means transformed from natural logarithm at prostate-specific antigen scale.

Note: ASL - At or above sensitivity limit.

^{--:} Covariate not applicable for dependent variable.

BSL - Below sensitivity limit.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Ionizing I | Radiation E | Exposure | Industrial Chemical Exposure | | | |
|---|-----------------|------------------------------|---------------------------------|----------------|---------------------------------|---|----------------|--|
| Variable | Level | No | Yes | p-Value | No | Yes | p-Value | |
| Malignant Systemic Neoplasm of Esophagus | Yes | (n=1,677) 0.1% | (n=546) 0.0% | 0.999 | (n=918) 0.1% | (n=1,305) 0.0% | 0.860 | |
| Malignant Systemic Neoplasm of Brain | Yes | (n=1,677) 0.1% | (n=546) 0.0% | 0.999 | (n=918) 0.2% | (n=1,305) 0.0% | 0.333 | |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | Yes | (n=1,677) 0.1% | (n=546) 0.2% | 0.988 | (n=918) 0.0% | (n=1,305) 0.2% | 0.640 | |
| Malignant Systemic Neoplasm of Thyroid Gland | Yes | (n=1,677) 0.2% | (n=546) 0.0% | 0.575 | (n=918) 0.1% | (n=1,305) 0.2% | 0.877 | |
| Malignant Systemic Neoplasm of Bronchus or Lung | Yes | (n=1,677) 0.4% | (n=546) 0.7% | 0.442 | (n=918) 0.3% | (n=1,305) 0.5% | 0.685 | |
| Malignant Systemic Neoplasm of Colon or Rectum | Yes | (n=1,677) 0.4% | (n=546) 0.4% | 0.999 | (n=918) 0.5% | (n=1,305) 0.3% | 0.595 | |
| Malignant Systemic Neoplasm of Kidney or Bladder | Yes | (n=1,677) 0.4% | (n=546) 0.9% | 0.207 | (n=918) 0.8% | (n=1,305) 0.3% | 0.229 | |
| Malignant Systemic Neoplasm of Prostate | Yes | (n=1,677) 1.6% | (n=546) 2.4% | 0.273 | (n=918) 2.2% | (n=1,305) 1.5% | 0.265 | |
| Malignant Systemic Neoplasm of Testicles | Yes | (n=1,677) 0.2% | (n=546) 0.0% | 0.751 | (n=918) 0.0% | (n=1,305) 0.2% | 0.386 | |
| Malignant Systemic Neoplasm of Ill-Defined Sites | Yes | (n=1,677) 0.2% | (n=546) 0.0% | 0.575 | (n=918) 0.3% | (n=1,305) 0.1% | 0.389 | |
| Malignant Systemic Neoplasm of Connective and Other Soft Tissues | Yes | (n=1,677) 0.1% | (n=546) 0.0% | 0.999 | (n=918) 0.1% | (n=1,305) 0.1% | 0.999 | |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | Yes | (n=1,677) 0.1% | (n=546) 0.2% | 0.988 | (n=918) 0.0% | (n=1,305) 0.2% | 0.640 | |
| Hodgkin's Disease | Yes | (n=1,677) 0.1% | (n=546) 0.0% | 0.999 | (n=918) 0.1% | (n=1,305) 0.1% | 0.999 | |
| Leukemia | Yes | (n=1,677) 0.1% | (n=546) 0.2% | 0.988 | (n=918) 0.2% | (n=1,305) 0.0% | 0.333 | |
| Non-Hodgkin's Lymphoma | Yes | (n=1,677) 0.2% | (n=546) 0.4% | 0.777 | (n=918) 0.4% | (n=1,305) 0.1% | 0.192 | |
| Other Malignant Systemic Neoplasms of Lymphoid and Histiocytic Tissue | Yes | (n=1,677) 0.1% | (n=546) 0.2% | 0.988 | (n=918) 0.2% | (n=1,305) 0.0% | 0.333 | |
| Multiple Myeloma | Yes | (n=1,677) 0.1% | (n=546) 0.0% | 0.999 | (n=918) 0.1% | (n=1,305) 0.0% | 0.999 | |
| Any Skin or Systemic Neoplasm | Yes | (n=1,665) 42.0% | (n=539) 45.5% | 0.173 | (n=911) 45.7% | (n=1,293) 40.9% | 0.031 | |
| Prostate-Specific Antigen (continuous - ng/ml) ^d | ASL | (n=1,635) $\bar{x}=0.995$ | $\frac{(n=527)}{\bar{x}=1.017}$ | 0.007 | $\frac{(n=895)}{\bar{x}=1.054}$ | $(\underline{n}=1,267)$ $\overline{x}=0.996$ | 0.085 | |
| (discrete) (discrete) | BSL Abnormal | (n=1,676) 2.5% 3.7% | (n=546) 3.5% 6.2% | 0.253 0.016 | (n=917) 2.4% 5.0% | (n=1,305) 2.9% 3.8% | 0.548 0.213 | |

d Analysis based on natural logarithm of prostate-specific antigen for measurements at or above sensitivity level; means transformed from natural logarithm of prostate-specific antigen scale.

Note: ASL - At or above sensitivity limit. BSL - Below sensitivity limit.

Table F-1-1. (Continued)
Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Her | bicide Expo | sure | Insecticide Exposure | | | |
|---|-----------------|-------------------------|---|----------------|--|---|----------------|--|
| Variable | Level | No | Yes | p-Value | No | Yes | p-Value | |
| Malignant Systemic Neoplasm | | | (n=1,384) | | (n=701) | (n=1,522) | | |
| of Esophagus | Yes | 0.1% | 0.0% | 0.800 | 0.0% | 0.1% | 0.999 | |
| Malignant Systemic Neoplasm | | | (n=1,384) | | (n=701) | (n=1,522) | | |
| of Brain | Yes | 0.0% | 0.1% | 0.710 | 0.1% | 0.1% | 0.999 | |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | Yes | (n=839) 0.0% | (n=1,384) 0.1% | 0.710 | (n=701) 0.0% | (n=1,522) 0.1% | 0.842 | |
| Malignant Systemic Neoplasm of Thyroid Gland | Yes | 0.2% | (n=1,384) 0.1% | 0.999 | (n=701) 0.3% | (n=1,522) 0.1% | 0.797 | |
| Malignant Systemic Neoplasm of Bronchus or Lung | Yes | (n=839) 0.4% | (n=1,384) 0.5% | 0.858 | (n=701) 0.6% | (n=1,522) 0.4% | 0.813 | |
| Malignant Systemic Neoplasm of Colon or Rectum | Yes | (n=839) 0.5% | (n=1,384) 0.4% | 0.943 | (n=701) 0.6% | (n=1,522) 0.3% | 0.634 | |
| Malignant Systemic Neoplasm of Kidney or Bladder | Yes | (n=839) 0.5% | (n=1,384) 0.5% | 0.999 | (n=701) 1.0% | (n=1,522) 0.3% | 0.049 | |
| Malignant Systemic Neoplasm of Prostate | Yes | (n=839) 1.3% | (n=1,384) 2.0% | 0.283 | (n=701) 1.6% | (n=1,522) 1.8% | 0.781 | |
| Malignant Systemic Neoplasm of Testicles | Yes | (n=839) 0.0% | (n=1,384) 0.2% | 0.451 | (n=701) 0.0% | (n=1,522) 0.2% | 0.579 | |
| Malignant Systemic Neoplasm of Ill-Defined Sites | Yes | (n=839) 0.4% | (n=1,384) 0.1% | 0.307 | (n=701) 0.3% | (n=1,522) 0.1% | 0.797 | |
| Malignant Systemic Neoplasm of Connective and Other Soft Tissues | Yes | (n=839) 0.2% | (n=1,384) 0.0% | 0.277 | (n=701) 0.1% | (n=1,522) 0.1% | 0.999 | |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | Yes | (n=839) 0.1% | (n=1,384) 0.1% | 0.999 | (n=701) 0.1% | (n=1,522) 0.1% | 0.999 | |
| Hodgkin's Disease | Yes | (n=839) 0.1% | (n=1,384) 0.1% | 0.999 | (n=701) 0.1% | (n=1,522) 0.1% | 0.999 | |
| Leukemia | Yes | (n=839) 0.1% | (n=1,384) 0.1% | 0.999 | (n=701) 0.0% | (n=1,522) 0.1% | 0.842 | |
| Non-Hodgkin's Lymphoma | Yes | (n=839) 0.2% | (n=1,384) 0.2% | 0.999 | (n=701) 0.1% | (n=1,522) 0.3% | 0.941 | |
| Other Malignant Systemic Neoplasms of Lymphoid and Histiocytic Tissue | Yes | | (n=1,384) 0.1% | 0.999 | (n=701) 0.1% | (n=1,522) 0.1% | 0.999 | |
| Multiple Myeloma | Yes | (n=839) 0.0% | (n=1,384) 0.1% | 0.999 | (n=701) 0.0% | (n=1,522) 0.1% | 0.999 | |
| Any Skin or Systemic Neoplasm | Yes | | (n=1,367) 44.9% | 0.015 | (n=698) 41.6% | (n=1,506) 43.5% | 0.417 | |
| Prostate-Specific Antigen (continuous - ng/ml) ^d | ASL | $\hat{x} = 1.043$ | (n=1,343) $\bar{x}=1.006$ (n=1,386) | 0.286 | $\frac{(n=683)}{\bar{x}=1.013}$ (n=701) | (n=1,479) $\bar{x}=1.023$ (n=1,521) | 0.722 | |
| (discrete) (discrete) | BSL Abnormal | (n=839) 2.4% 4.3% | 2.9% 4.3% | 0.561 0.957 | 2.6% 5.4% | 2.8% 3.8% | 0.904 0.083 | |

d Analysis based on natural logarithm of prostate-specific antigen for measurements at or above sensitivity level; means transformed from natural logarithm of prostate-specific antigen scale.

Note: ASL - At or above sensitivity limit.

BSL - Below sensitivity limit.

Table F-1-1. (Continued) Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Degreasing Chemical Exposure | | | |
|--|-----------------|---------------------------------------|---|----------------|--|
| Variable | Level | No | Yes | p-Value | |
| Malignant Systemic Neoplasm of Esophagus | Yes | (n=822) 0.0% | (n=1,401) 0.1% | 0.999 | |
| Malignant Systemic Neoplasm of Brain | Yes | (n=822) 0.2% | (n=1,401) 0.0% | 0.265 | |
| Malignant Systemic Neoplasm of Thymus, Heart, or Mediastinum | Yes | (n=822) 0.0% | (n=1,401) 0.1% | 0.726 | |
| Malignant Systemic Neoplasm of Thyroid Gland | Yes | (n=822) 0.4% | (n=1,401) 0.1% | 0.290 | |
| Malignant Systemic Neoplasm of Bronchus or Lung | Yes | (n=822) 0.2% | (n=1,401) 0.6% | 0.432 | |
| Malignant Systemic Neoplasm of Colon or Rectum | Yes | (n=822) 0.5% | (n=1,401) 0.4% | 0.905 | |
| Malignant Systemic Neoplasm of Kidney or Bladder | Yes | (n=822) 0.7% | (n=1,401) 0.4% | 0.370 | |
| Malignant Systemic Neoplasm of Prostate | Yes | (n=822) 2.2% | (n=1,401) 1.5% | 0.303 | |
| Malignant Systemic Neoplasm of Testicles | Yes | (n=822) 0.1% | (n=1,401) 0.1% | 0.999 | |
| Malignant Systemic Neoplasm of Ill-Defined Sites | Yes | (n=822) 0.2% | (n=1,401) 0.1% | 0.983 | |
| Malignant Systemic Neoplasm of Connective and Other Soft Tissues | Yes | (n=822) 0.1% | (n=1,401) 0.1% | 0.999 | |
| Carcinoma in Situ of the Penis, Other, and Unspecified Sites | Yes | (n=822) 0.1% | (n=1,401) 0.1% | 0.999 | |
| Hodgkin's Disease | Yes | (n=822) 0.1% | (n=1,401) 0.1% | 0.999 | |
| Leukemia | Yes | (n=822) 0.0% | (n=1,401) 0.1% | 0.726 | |
| Non-Hodgkin's Lymphoma | Yes | (n=822) 0.4% | (n=1,401) 0.1% | 0.546 | |
| Other Malignant Systemic Neoplasms of Lymphoid and Histiocytic Tissue | Yes | (n=822) 0.1% | (n=1,401) 0.1% | 0.999 | |
| Multiple Myeloma | Yes | (n=822) 0.0% | (n=1,401) 0.1% | 0.999 | |
| Any Skin or Systemic Neoplasm | Yes | (n=817) 43.3% | (n=1,387) 42.3% | 0.521 | |
| Prostate-Specific Antigen (continuous - ng/ml) ^d | ASL | (n=800) $\bar{x}=1.045$ (n=822) | (n=1,362) $\bar{x}=1.005$ (n=1,400) | 0.254 | |
| (discrete) (discrete) | BSL Abnormal | 2.6% 4.7% | 2.8% 4.1% | 0.904 0.451 | |

^d Analysis based on natural logarithm of prostate-specific antigen for measurements at or above sensitivity level; means transformed from natural logarithm of prostate-specific antigen scale.

Note: ASL - At or above sensitivity limit. BSL - Below sensitivity limit.

Table F-1-1. (Continued) Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | | Lifetim | e Cigarette Smo | oking History (P: | ack-years) |
|---|----------|---------|-----------------|-------------------|------------|
| Variable Variable | Level | 0 | >0-10 | >10 | p-Value |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Esophagus | Yes | 0.0% | 0.0% | 0.1% | 0.501 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Brain | Yes | 0.0% | 0.2% | 0.1% | 0.662 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Thymus, Heart, or Mediastinum | Yes | 0.0% | 0.0% | 0.2% | 0.251 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Thyroid Gland | Yes | 0.3% | 0.2% | 0.1% | 0.587 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Bronchus or Lung | Yes | 0.0% | 0.2% | 1.0% | 0.008 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Colon or Rectum | Yes | 0.3% | 0.3% | 0.5% | 0.707 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Kidney or Bladder | Yes | 0.2% | 0.2% | 1.0% | 0.027 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Prostate | Yes | 2.0% | 1.3% | 1.9% | 0.586 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Testicles | Yes | 0.0% | 0.0% | 0.3% | 0.125 |
| Malignant Systemic Neoplasm | | (n=608) | (n=680) | (n=932) | |
| of Ill-Defined Sites | Yes | 0.3% | 0.0% | 0.2% | 0.361 |
| Malignant Systemic Neoplasm | | (n=608) | (n = 680) | (n=932) | |
| of Connective and Other Soft | Yes | `0.0%´ | 0.0% | 0.2% | 0.251 |
| Tissues | | | | | |
| Carcinoma in Situ of the | | (n=608) | (n=680) | (n=932) | |
| Penis, Other, and Unspecified Sites | Yes | 0.2% | 0.2% | 0.0% | 0.482 |
| Hodgkin's Disease | | (n=608) | (n=680) | (n=932) | |
| | Yes | 0.3% | 0.0% | 0.0% | 0.070 |
| Leukemia | | (n=608) | (n=680) | (n=932) | |
| | Yes | 0.2% | 0.2% | 0.0% | 0.482 |
| Non-Hodgkin's Lymphoma | | (n=608) | (n=680) | (n=932) | |
| 2 7 1 | Yes | 0.3% | 0.0% | 0.3% | 0.331 |
| Other Malignant Sytemic | | (n=608) | (n=680) | (n=932) | |
| Neoplasms of Lymphoid and Histiocytic Tissue | Yes | 0.2% | 0.0% | 0.1% | 0.601 |
| Multiple Myeloma | | (n=608) | (n=680) | (n=932) | |
| With the Wilder | Yes | 0.0% | 0.2% | 0.0% | 0.322 |
| Any Skin or Systemic | - *- | (n=603) | (n=673) | (n=925) | |
| Neoplasm | Yes | 41.6% | 41.8% | 44.5% | 0.411 |
| Prostate-Specific Antigen | | | (n=2,160) | | |
| (continuous - ng/ml) | ASL | | r = -0.008 | | 0.708 |
| (commuous ng/mi) | | (n=607) | (n=680) | (n=932) | |
| (discrete) | BSL | 2.3% | 2.5% | 3.1% | 0.588 |
| (discrete) | Abnormal | 4.5% | 4.9% | 3.8% | 0.545 |

^d Analysis based on natural logarithm of prostate-specific antigen for measurements at or above sensitivity level; means transformed from natural logarithm of prostate-specific antigen scale.

Note: ASL - At or above sensitivity limit. BSL - Below sensitivity limit.

Table F-1-1. (Continued) Dependent Variable-Covariate Associations for the Neoplasia Assessment

| Dependent | Lifetime Alcohol History (Drink-years) | | | | | |
|-----------------------------------|--|--------------|-------------|------------------|---------|--|
| Variable | Level | 0 | >0-40 | >40 | p-Value | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | | |
| of Esophagus | Yes | 0.0% | 0.1% | 0.0% | 0.792 | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | • | |
| of Brain | Yes | 0.8% | 0.0% | 0.2% | 0.017 | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | | |
| of Thymus, Heart, or | Yes | 0.0% | 0.1% | 0.0% | 0.627 | |
| Mediastinum | | | | | | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | | |
| of Thyroid Gland | Yes | 0.0% | 0.2% | 0.2% | 0.872 | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | | |
| of Bronchus or Lung | Yes | 0.0% | 0.5% | 0.4% | 0.622 | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | | |
| of Colon or Rectum | Yes | 0.0% | 0.4% | 0.5% | 0.682 | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | | |
| of Kidney or Bladder | Yes | 0.0% | 0.3% | 1.3% | 0.014 | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | | |
| of Prostate | Yes | 0.0% | 1.6% | 2.1% | 0.198 | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | 0.250 | |
| of Testicles | Yes | 0.0% | 0.2% | 0.0% | 0.496 | |
| Malignant Systemic Neoplasm | | (n=134) | (n=1,487) | (n=560) | 0.150 | |
| of Ill-Defined Sites | Yes | 0.0% | 0.3% | 0.0% | 0.393 | |
| Malignant Systemic Neoplasm | 202 | (n=134) | (n=1,487) | (n=560) | 0.575 | |
| of Connective and Other Soft | Yes | 0.0% | 0.1% | 0.0% | 0.627 | |
| Carcinoma in Situ of the | | (n=134) | (n=1,487) | (n=560) | | |
| Penis, Other, and Unspecified | Yes | 0.0% | 0.1% | 0.0% | 0.627 | |
| Sites | | 0.070 | 0.170 | 0.070 | 0.027 | |
| Hodgkin's Disease | | (n=134) | (n=1,487) | (n=560) | | |
| | Yes | 0.0% | 0.1% | 0.2% | 0.711 | |
| Leukemia | | (n=134) | (n=1,487) | (n=560) | 0.711 | |
| | Yes | 0.8% | 0.1% | 0.0% | 0.032 | |
| Non-Hodgkin's Lymphoma | 205 | (n=134) | (n=1,487) | (n=560) | 0.032 | |
| To a stocking of Dynipholina | Yes | 0.0% | 0.2% | (11=360) 0.4% | 0.685 | |
| Other Malignant Systemic | 103 | (n=134) | | | 0.003 | |
| Neoplasms of Lymphoid and | Yes | (n=134) 0.0% | (n=1,487) | (n=560) | 0.055 | |
| Histiocytic Tissue | 1 63 | 0.0% | 0.0% | 0.4% | 0.055 | |
| Multiple Myeloma | | (n = 124) | (m = 1 405) | (- ECO) | | |
| viditiple iviyelonia | Yes | (n=134) | (n=1,487) | (n=560) | 0.700 | |
| Any Clain on Cyatamia | 168 | 0.0% | 0.1% | 0.0% | 0.792 | |
| Any Skin or Systemic Neoplasm | Vaa | (n=132) | (n=1,474) | (n=566) | 0.046 | |
| - | Yes | 37.1% | 41.6% | 46.8% | 0.046 | |
| Prostate-Specific Antigen | A CT | | (n=2,124) | | | |
| (continuous - ng/ml) ^d | ASL | | r = -0.033 | | 0.124 | |
| (1) | 25- | (n=134) | (n=1,486) | (n=560) | | |
| (discrete) | BSL | 1.5% | 2.8% | 2.5% | 0.666 | |
| (discrete) | Abnormal | 4.5% | 4.7% | 3.0% | 0.245 | |

^d Analysis based on natural logarithm of prostate-specific antigen for measurements at or above sensitivity level; means transformed from natural logarithm of prostate-specific antigen scale.

Note: ASL - At or above sensitivity limit. BSL - Below sensitivity limit.

Table F-1-2. Analysis of Melanoma Miscoded Non-Black Participant Recoded Re-Analysis of Table 10-14

| a) MODEL 1: RANCH HANDS VS. COMPARISONS — UNADJUSTED | | | | | | | |
|--|--------------------------|--------------|----------------|----------------------------------|---------------|--|--|
| Occupational Category | Group | n | Percent Yes | Est. Relative Risk (95% C.I.) | p-Value | | |
| All | Ranch Hand Comparison | 886 1,199 | 1.2 0.9 | 1.36 (0.59,3.15) | 0.618 | | |
| Officer | Ranch Hand Comparison | 357 490 | 1.7 1.0 | 1.66 (0.50,5.48) | 0.596 | | |
| Enlisted Flyer | Ranch Hand Comparison | 150 188 | 0.0 0.5 | | · | | |
| Enlisted Groundcrew | Ranch Hand Comparison | 379 521 | 1.3 1.0 | 1.38 (0.40,4.80) | 0.852 | | |

| b) MODEL 1: RANCH HANDS VS. COMPARISONS — ADJUSTED | | | | | | | |
|--|----------------------------------|---------|--------------------------------|--|--|--|--|
| Occupational Category | Adj. Relative Risk (95% C.I.) | p-Value | Covariate Remarks ^a | | | | |
| All | 1.24 (0.53,2.90) | 0.613 | LAT $(p=0.040)$ | | | | |
| Officer | 1.57 (0.47,5.23) | 0.460 | IC (p=0.011) DC (p=0.052) | | | | |
| Enlisted Flyer | | | - | | | | |
| Enlisted Groundcrew | 1.23 (0.35,4.32) | 0.747 | | | | | |

^a Covariates and associated p-values correspond to final model based on all participants with available data.

^{--:} Relative risk, confidence interval, and p-value not presented due to the sparse number of abnormalities.

Table F-1-2. (Continued) Analysis of Melanoma Miscoded Non-Black Participant Recoded Re-Analysis of Table 10-14

| | c) MODEL 2: | : RANCH HAND | OS — INITIAL DIOXIN — UNADJUST | ÆD |
|------------------|--------------|-----------------|--|---------------------------|
| Initial Dioxin (| Category Sum | mary Statistics | Analysis Results for Log ₂ (Ini | tial Dioxin) ^a |
| Initial Dioxin | n | Percent Yes | Estimated Relative Risk (95% C.I.) ^b | p-Value |
| Low | 152 | 2.0 | 0.61 (0.30,1.24) | 0.136 |
| Medium | 161 | 1.2 | | |
| High | 164 | 1.2 | | |

| | d) MODEL 2: RANCH HA | NDS — INITIAL DIOXI | N — ADJUSTED |
|----------|--|---|--|
| | | lts for Log ₂ (Initial Dioxi | n) ^c |
| <u> </u> | Adj. Relative Risk (95% C.I.) ^b | p-Value | Covariate Remarks |
| 477 | 0.43 (0.18,0.99) | 0.021 | SKIN (p=0.047) HAIR (p=0.003) IC (p=0.013) DC (p=0.008) |

^a Adjusted for percent body fat at the time of duty in SEA and change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin.

Note: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt.

b Relative risk for a twofold increase in initial dioxin.

^c Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Table F-1-2. (Continued) Analysis of Melanoma Miscoded Non-Black Participant Recoded Re-Analysis of Table 10-14

| e) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — UNADJUSTED | | | | | | | |
|---|-------|----------------|--|---------|--|--|--|
| Dioxin Category | n | Percent Yes | Est. Relative Risk (95% C.I.) ^{ab} | p-Value | | | |
| Comparison | 1,003 | 0.9 | | | | | |
| Background RH | 356 | 0.8 | 0.94 (0.25,3.51) | 0.921 | | | |
| Low RH | 232 | 2.2 | 2.46 (0.81,7.45) | 0.111 | | | |
| High RH | 245 | 0.8 | 0.90 (0.19,4.23) | 0.895 | | | |
| Low plus High RH | 477 | 1.5 | 1.65 (0.61,4.49) | 0.326 | | | |

| f) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED | | | | | | |
|---|-----|--|---------|-------------------------------|--|--|
| Dioxin Category | п | Adj. Relative Risk (95% C.I.) ^{ac} | p-Value | Covariate Remarks | | |
| Comparison | 991 | | | LAT (p=0.033) IC (p=0.048) | | |
| Background RH | 355 | 0.97 (0.25,3.76) | 0.964 | DC (p=0.053) | | |
| Low RH | 230 | 2.34 (0.74,7.40) | 0.148 | | | |
| High RH | 245 | 0.93 (0.19,4.53) | 0.930 | | | |
| Low plus High RH | 475 | 1.64 (0.58,4.63) | 0.351 | | | |

^a Relative risk and confidence interval relative to Comparisons.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤10 ppt.

Background (Ranch Hand): Current Dioxin ≤10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Adjusted for percent body fat at the time of duty in SEA and change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin.

^c Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Table F-1-2. (Continued) Analysis of Melanoma Miscoded Non-Black Participant Recoded Re-Analysis of Table 10-14

| | Сш | rent Dioxin Cate Percent Yes/(n) | Analysis Results for (Current Dioxin | | |
|--------------------|--------------|-------------------------------------|--------------------------------------|---|---------|
| Model ² | Low | Medium | High | Est. Relative Risk (95% C.I.) ^b | p-Value |
| 4 | 0.7 (281) | 2.2 (272) | 0.7 (280) | 0.98 (0.64,1.50) | 0.934 |
| 5 | 1.1 (285) | 1.1 (268) | 1.4 (280) | 0.99 (0.69,1.42) | 0.944 |
| 6 ^c | 1.1 (284) | 1.1 (268) | 1.4 (280) | 1.02 (0.69,1.51) | 0.938 |

| | h) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED | | | | | | | | |
|----------------|--|--|---|---|--|--|--|--|--|
| Modela | n | Analysis Re Adj. Relative Risk (95% C.I.) ^b | sults for Log ₂ (Cu p-Value | rrent Dioxin + 1) Covariate Remarks | | | | | |
| 4 | 830 | 1.01 (0.64,1.57) | 0.982 | HAIR (p=0.086) LAT (p=0.019) IC (p=0.130) DC (p=0.044) | | | | | |
| 5 | 830 | 1.01 (0.69,1.48) | 0.950 | HAIR (p=0.087) LAT (p=0.019) IC (p=0.130) DC (p=0.043) | | | | | |
| 6 ^d | 829 | 1.03 (0.69,1.54) | 0.869 | HAIR (p=0.088) LAT (p=0.020) IC (p=0.135) DC (p=0.044) | | | | | |

Note: Model 4: Low = \leq 8.1 ppt; Medium = >8.1-20.5 ppt; High = >20.5 ppt. Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

Model 4: Log₂ (lipid-adjusted current dioxin + 1).
 Model 5: Log₂ (whole-weight current dioxin + 1).
 Model 6: Log₂ (whole-weight current dioxin + 1), adjusted for log₂ total lipids.

^b Relative risk for a twofold increase in current dioxin.

^c Adjusted for log₂ total lipids.

^d Adjusted for log₂ total lipids in addition to covariates specified under "Covariate Remarks" column.

APPENDIX F-2.

Interaction Tables for the Neoplasia Assessment

This appendix contains exposure analyses results of interactions between covariates and group or dioxin. Results are presented for separate strata of the covariate and include sample sizes, percent abnormal, relative risks, confidence intervals, and p-values for discrete dependent variables. Sample sizes, adjusted means, differences of adjusted means and confidence intervals or adjusted slopes and standard errors, and p-values are given for continuous dependent variables. Means are transformed back to the original scale, if necessary. Chapter 7, Statistical Methods, provides further details on the analytical approaches used in the interaction analyses. The covariate involved in the interaction and a reference to the analysis table in Chapter 10, Neoplasia Assessment, are given in the heading of each subtable. A summary of the interactions described in this appendix follows.

| Appendix F-2 Table | Chapter 10 Table | Dependent Variable | Model | Covariate |
|-----------------------|---------------------|--|-----------------------|---|
| F-2-1 | 10-3 | Any Skin Neoplasms | 5 6 | Skin Color, Industrial Chemical Exposure Skin Color, Industrial Chemical Exposure |
| F-2-2 | 10-4 | Malignant Skin Neoplasms | 2 3 | Insecticide Exposure Industrial Chemical Exposure, Insecticide Exposure |
| F-2-3 | 10-5 | Benign Skin Neoplasms | 5 6 | Skin Color Skin Color |
| F-2-4 | 10-7 | Basal Cell Carcinoma (All Sites Combined) | 6 | Asbestos Exposure |
| F-2-5 | 10-9 | Basal Cell Carcinoma (Trunk) | 3 4 5 6 | Insecticide Exposure Insecticide Exposure Insecticide Exposure Insecticide Exposure |
| F-2-6 | 10-13 | Nonmelanoma | 2 | Insecticide Exposure |
| F-2-7 | 10-16 | Malignant Systemic Neoplasms | 2 4 5 | Lifetime Cigarette Smoking History Degreasing Chemical Exposure Lifetime Cigarette Smoking History, Degreasing Chemical Exposure Lifetime Cigarette Smoking History, Degreasing Chemical Exposure |
| F-2-8 | 10-18 | Systemic Neoplasms of Uncertain Behavior or Unspecified Nature | 4 5 6 | Asbestos Exposure Asbestos Exposure Asbestos Exposure |
| F-2-9 | 10-19 | Malignant Systemic Neoplasms (Eye, Ear, Face, Head, and Neck) | 2 3 | Lifetime Cigarette Smoking History Lifetime Cigarette Smoking History, Degreasing Chemical Exposure |
| F-2-10 | 10-28 | Malignant Systemic Neoplasms (Prostate) | 3 4 5 6 | Degreasing Chemical Exposure Degreasing Chemical Exposure Degreasing Chemical Exposure Degreasing Chemical Exposure |
| F-2-11 | 10-38 | Any Skin or Systemic Neoplasms | 4 5 6 | Eye Color Eye Color Eye Color |
| F-2-12 | 10-40 | Prostate-Specific Antigen (Continuous) | 1 2 3 | Insecticide Exposure Age Insecticide Exposure |
| F-2-13 | 10-41 | Prostate-Specific Antigen (Discrete) | 1 3 4 5 6 | Lifetime Cigarette Smoking History Insecticide Exposure Degreasing Chemical Exposure Degreasing Chemical Exposure Degreasing Chemical Exposure |

Table F-2-1.
Interaction Table for Any Skin Neoplasms

| | | | | URRENT DIOXIN — ADJUSTE Color: Table 10-3) | D |
|--------------------|--------------------------------------|-------------------|---|---|-------|
| Current Stratum | Dioxin Category Current Dioxin | Summary | Analysis Results for Log ₂ (Current Diox Adjusted Relative Risk (95% C.I.) ² p-Valu | | |
| Non-Peach | Low Medium High | 60 56 55 | 36.7 23.2 16.4 | 0.74 (0.57,0.94) | 0.016 |
| Peach | Low Medium High | 225 211 224 | 32.0 36.0 30.4 | 0.98 (0.89,1.08) | 0.685 |

| | | | | URRENT DIOXIN — ADJUST emical Exposure: Table 10-3) | ED |
|---|-----------------------|-------------------|----------------------|---|-------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (Current Dio Adjusted Relative Risk (95% C.I.) ^a p-Val | |
| No | Low Medium High | 145 122 89 | 36.6 31.2 20.2 | 0.83 (0.71,0.97) | 0.018 |
| Yes | Low Medium High | 140 145 190 | 29.3 35.2 31.1 | 1.01 (0.90,1.12) | 0.928 |

Table F-2-1. (Continued) Interaction Table for Any Skin Neoplasms

| | | | | URRENT DIOXIN — ADJUSTE Color: Table 10-3) | D |
|---|-----------------------|-------------------|----------------------|--|-------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (Current Dioxin + Adjusted Relative Risk (95% C.I.) ^a p-Value | |
| Non-Peach | Low Medium High | 60 56 55 | 36.7 23.2 16.4 | 0.69 (0.53,0.89) | 0.004 |
| Peach | Low Medium High | 224 211 224 | 32.1 36.0 30.4 | 0.91 (0.82,1.01) | 0.091 |

| d) MODEL 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Industrial Chemical Exposure: Table 10-3) | | | | | | | |
|--|-----------------------|-------------------|----------------------|--|-------|--|--|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (Current Dioxin + 1 Adjusted Relative Risk (95% C.I.) ^a p-Value | | | |
| No | Low Medium High | 145 122 89 | 36.6 31.2 20.2 | 0.78 (0.66,0.91) | 0.002 | | |
| Yes | Low Medium High | 139 145 190 | 29.5 35.2 31.1 | 0.93 (0.83,1.05) | 0.261 | | |

^a Relative risk for a twofold increase in current dioxin.

Note: Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

Table F-2-2.
Interaction Table for Malignant Skin Neoplasms

| a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED (Initial Dioxin-by-Insecticide Exposure: Table 10-4) | | | | | | | | |
|--|-----------------------|-------------------|--|---|---------|--|--|--|
| Initial | Dioxin Category | Summary | Analysis Results for Log ₂ (Initial Dioxin) | | | | | |
| Stratum | Initial Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^a | p-Value | | | |
| No | Low Medium High | 30 34 41 | 10.0 8.8 17.1 | 1.27 (0.84,1.93) | 0.262 | | | |
| Yes | Low Medium High | 120 125 122 | 18.3 14.4 5.7 | 0.64 (0.47,0.87) | 0.004 | | | |

| b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Industrial Chemical Exposure: Table 10-4) | | | | | | |
|---|------------------|-----|----------------|---|---------|--|
| Stratum | Dioxin Category | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^b | p-Value | |
| No | Comparison | 407 | 11.3 | | | |
| | Background RH | 181 | 18.2 | 1.64 (0.99,2.72) | 0.055 | |
| | Low RH | 96 | 19.8 | 1.98 (1.06,3.69) | 0.032 | |
| | High RH | 75 | 4.0 | 0.36 (0.11,1.22) | 0.102 | |
| | Low plus High RH | 171 | 12.9 | 1.23 (0.69,2.17) | 0.485 | |
| Yes | Comparison | 577 | 12.1 | | | |
| | Background RH | 173 | 10.4 | 0.81 (0.46,1.44) | 0.472 | |
| | Low RH | 132 | 15.9 | 1.15 (0.66,2.00) | 0.626 | |
| | High RH | 169 | 10.1 | 0.97 (0.54,1.72) | 0.910 | |
| | Low plus High RH | 301 | 12.6 | 1.06 (0.68,1.64) | 0.805 | |

Table F-2-2. (Continued) Interaction Table for Malignant Skin Neoplasms

c) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Insecticide Exposure: Table 10-4) Adjusted Relative Risk Percent (95% C.I.)b p-Value Yes Dioxin Category Stratum n 369 9.2 No Comparison 0.274 1.50 (0.72, 3.12) 85 14.1 Background RH 0.80 (0.26,2.46) 0.695 9.1 44 Low RH 0.093 14.8 2.02 (0.89,4.56) 61 High RH 1.40 (0.69,2.83) 0.350 Low plus High RH 12.4 105 13.3 615 Yes Comparison 0.677 Background RH 269 14.5 1.09 (0.71,1.68) 19.6 1.57 (0.99,2.47) 0.054 Low RH 184 0.51 (0.26, 0.99) 0.047 183 6.0 High RH

12.8

Low plus High RH

Note: Model 2: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt.

Model 3: RH = Ranch Hand.

Comparison: Current Dioxin ≤10 ppt.

Background (Ranch Hand): Current Dioxin ≤10 ppt.

367

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

0.833

1.04 (0.70, 1.56)

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^a Relative risk for a twofold increase in initial dioxin.

^b Relative risk and confidence interval relative to Comparisons.

Table F-2-3.
Interaction Table for Benign Skin Neoplasms

| a) MODEL 5: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Skin Color: Table 10-5) | | | | | | | |
|---|--------------------------------------|-------------------|------------------------|--|----------------------------|--|--|
| Current Stratum | Dioxin Category Current Dioxin | Summary | Statistics Percent Yes | Analysis Results for Log ₂ (Condition of Adjusted Relative Risk (95% C.I.) ^a | urrent Dioxin + 1) p-Value | | |
| Non-Peach | Low Medium High | 71 78 69 | 25.4 18.0 8.7 | 0.69 (0.53,0.89) | 0.005 | | |
| Peach | Low Medium High | 227 212 226 | 19.4 21.2 20.4 | 0.97 (0.86,1.08) | 0.555 | | |

| | | | | URRENT DIOXIN — ADJUSTE Color: Table 10-5) | D |
|--|-----------------------|-------------------|----------------------|---|---------|
| Current Dioxin Category Summary Statistics Analysis Results for Log ₂ (Current Dioxin | | | | | |
| Stratum | Current Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ² | p-Value |
| Non-Peach | Low Medium High | 71 78 69 | 25.4 18.0 8.7 | 0.66 (0.51,0.85) | 0.002 |
| Peach | Low Medium High | 226 212 226 | 19.5 21.2 20.4 | 0.92 (0.82,1.04) | 0.175 |

^a Relative risk for a twofold increase in current dioxin.

Note: Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

Table F-2-4.
Interaction Table for Basal Cell Carcinoma (All Sites Combined)

| | | | | JRRENT DIOXIN — ADJUSTE Exposure: Table 10-7) | D |
|---|-----------------------|-------------------|---------------------|--|---------------------------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (Cu Adjusted Relative Risk (95% C.I.) ² | rrent Dioxin + 1) p-Value |
| No | Low Medium High | 209 195 199 | 11.0 14.4 9.1 | 0.99 (0.84,1.17) | 0.889 |
| Yes | Low Medium High | 73 71 78 | 15.1 8.5 7.7 | 0.69 (0.51,0.92) | 0.011 |

^a Relative risk for a twofold increase in current dioxin.

Note: Model 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

Table F-2-5.
Interaction Table for Basal Cell Carcinoma (Trunk)

| (Dioxin Category-by-Insecticide Exposure: Table 10-9) | | | | | | | | | |
|---|------------------|-----|----------------|---|---------|--|--|--|--|
| Stratum | Dioxin Category | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^a | p-Value | | | | |
| No | Comparison | 369 | 2.2 | | | | | | |
| | Background RH | 85 | 0.0 | | | | | | |
| | Low RH | 44 | 4.6 | 2.10 (0.18,24.34) | 0.553 | | | | |
| | High RH | 61 | 6.6 | 4.10 (0.44,38.34) | 0.215 | | | | |
| | Low plus High RH | 105 | 5.7 | 3.07 (0.38,24.55) | 0.289 | | | | |
| Yes | Comparison | 613 | 3.3 | | | | | | |
| | Background RH | 269 | 4.1 | 0.73 (0.32,1.66) | 0.452 | | | | |
| | Low RH | 184 | 4.9 | 1.02 (0.42,2.47) | 0.974 | | | | |
| | High RH | 183 | 1.6 | 0.38 (0.10,1.42) | 0.152 | | | | |
| | Low plus High RH | 367 | 3.3 | 0.73 (0.32,1.64) | 0.444 | | | | |

| | | | | URRENT DIOXIN — ADJUSTE e Exposure: Table 10-9) | ID. |
|--|-----------------------|-------------------|-------------------|--|-------------------------------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (Cu Adjusted Relative Risk (95% C.I.) ^b | ırrent Dioxin + 1) p-Value |
| No | Low Medium High | 72 54 64 | 0.0 5.6 4.7 | 1.71 (1.06,2.77) | 0.028 |
| Yes | Low Medium High | 209 215 215 | 4.3 4.2 2.3 | 0.91 (0.66,1.26) | 0.575 |

| | ED . | | | | |
|--------------------|----------------------------------|-------------------|------------------------|---|----------------------------|
| Current Stratum | Dioxin Category Current Dioxin | Summary n | Statistics Percent Yes | Analysis Results for Log ₂ (C Adjusted Relative Risk (95% C.I.) ^b | urrent Dioxin + 1) p-Value |
| No | Low Medium High | 71 53 67 | 0.0 5.7 4.5 | 1.61 (1.05,2.49) | 0.030 |
| Yes | Low Medium High | 214 215 213 | 4.7 4.7 1.4 | 0.89 (0.68,1.17) | 0.416 |

Table F-2-5. (Continued) Interaction Table for Basal Cell Carcinoma (Trunk)

| | | | | URRENT DIOXIN — ADJUSTI e Exposure: Table 10-9) | ED |
|---|-----------------------|-------------------|---|--|-------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | Analysis Results for Log ₂ (C Adjusted Relative Risk (95% C.I.) ^b | urrent Dioxin + 1) p-Value | |
| No | Low Medium High | 71 53 67 | 0.0 5.7 4.5 | 1.68 (1.07,2.63) | 0.024 |
| Yes | Low Medium High | 213 215 213 | 4.7 4.7 1.4 | 0.91 (0.69,1.21) | 0.538 |

^a Relative risk and confidence interval relative to Comparisons.

--: Adjusted relative risk, confidence interval, and p-value not presented due to zero abnormalities.

Note: Model 3: RH = Ranch Hand.

Comparison: Current Dioxin ≤10 ppt.

Background (Ranch Hand): Current Dioxin ≤10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt.

Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

^b Relative risk for a twofold increase in current dioxin.

Table F-2-6.
Interaction Table for Nonmelanoma

| | | | | ITTIAL DIOXIN — ADJUSTE Exposure: Table 10-13) | D |
|-----------|-----------------------|-------------------|---------------------|---|---------------------------------|
| Initial 1 | Dioxin Category | Summary | Statistics | Analysis Results for Lo | g ₂ (Initial Dioxin) |
| Stratum | Initial Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^a | p-Value |
| No | Low Medium | 30 34 | 10.0 8.8 | 1.17 (0.76,1.83) | 0.475 |
| , | High | 41 | 12.2 | 0.65 (0.40.0.00) | 0.006 |
| Yes | Low Medium High | 120 125 122 | 17.5 13.6 5.7 | 0.65 (0.48,0.88) | 0.006 |

^a Relative risk for a twofold increase in initial dioxin.

Note: Model 2: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt.

Table F-2-7.
Interaction Table for Malignant Systemic Neoplasms

| a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED (Initial Dioxin-by-Lifetime Cigarette Smoking History: Table 10-16) | | | | | | | | |
|---|-------------------|--------|--------------------------|---|---------|--|--|--|
| Initial Dioxi | n Category S | ummary | Analysis Results for Log | ₂ (Initial Dioxin) | | | | |
| Stratum | Initial Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ² | p-Value | | | |
| 0 Pack-years | Low | 45 | 8.9 | 0.29 (0.07,1.17) | 0.081 | | | |
| o ruon jours | Medium | 38 | 2.6 | | | | | |
| | High | 53 | 0.0 | | | | | |
| >0-10 Pack-years | Low | 50 | 8.0 | 0.48 (0.19,1.19) | 0.112 | | | |
| , , <u>, , , , , , , , , , , , , , , , , </u> | Medium | 44 | 2.3 | | | | | |
| | High | 66 | 1.5 | | | | | |
| >10 Pack-years | Low | 75 | 5.3 | 0.96 (0.62,1.50) | 0.872 | | | |
| - 10 1 44011 3 4410 | Medium | 90 | 13.3 | | | | | |
| | High | 53 | 3.8 | | | | | |

| | (Current D | ioxin-by-D | egreasing Cho | URRENT DIOXIN — ADJUSTE | |
|--------------------|----------------------------------|-------------------|------------------------|--|---------|
| Current Stratum | Dioxin Category Current Dioxin | Summary n | Statistics Percent Yes | Analysis Results for Log ₂ (Cu Adjusted Relative Risk (95% C.I.) ^b | p-Value |
| No | Low Medium High | 152 111 64 | 2.0 11.7 4.7 | 1.51 (1.05,2.16) | 0.026 |
| Yes | Low Medium High | 140 185 233 | 5.7 6.0 2.6 | 0.86 (0.63,1.18) | 0.362 |

| Current Dic | oxin Category | Summary | Analysis Results for Log ₂ (Co | urrent Dioxin - | |
|----------------------|-------------------|---------|---|---|---------|
| Stratum | Current Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^b | p-Value |
| 0 Pack-years | Low | 88 | 4.6 | 0.80 (0.48,1.33) | 0.390 |
| J = ===== | Medium | 80 | 6.3 | . 📗 | |
| | High | 77 | 1.3 | | |
| >0-10 Pack- | Low | 94 | 1.1 | 1.00 (0.61,1.63) | 0.993 |
| years | Medium | 75 | 6.7 | | |
| • | High | 100 | 1.0 | | |
| >10 Pack-years | Low | 115 | 7.8 | 1.22 (0.94,1.59) | 0.144 |
| - 10 1 doi: 1 doi: 1 | Medium | 137 | 4.4 | | |
| | High | 119 | 10.1 | | |

Table F-2-7. (Continued) Interaction Table for Malignant Systemic Neoplasms

| | | | | JRRENT DIOXIN — ADJUST mical Exposure: Table 10-16) | |
|---|-----------------------|-------------------|-------------------|---|-----------------------------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (C Adjusted Relative Risk (95% C.I.) ^b | Current Dioxin + 1) p-Value |
| No | Low Medium High | 147 115 65 | 3.4 7.0 9.2 | 1.43 (1.04,1.96) | 0.030 |
| Yes | Low Medium High | 150 177 231 | 6.0 4.5 3.5 | 0.94 (0.73,1.20) | 0.603 |

| Current Di | oxin Category | Summary | Analysis Results for Log ₂ (Cu | ırrent Dioxin + 1 | |
|----------------------|-----------------------|-------------------|---|---|---------|
| Stratum | Current Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^b | p-Value |
| 0 Pack-years | Low Medium High | 88 80 77 | 4.6 6.3 1.3 | 0.79 (0.47,1.33) | 0.373 |
| >0-10 Pack- years | Low Medium High | 94 75 100 | 1.1 6.7 1.0 | 0.99 (0.60,1.62) | 0.963 |
| >10 Pack-years | Low Medium High | 114 137 119 | 7.9 4.4 10.1 | 1.20 (0.90,1.59) | 0.218 |

| | | | | JRRENT DIOXIN — ADJUSTE emical Exposure: Table 10-16) | ED |
|-------------------|--|-------------------|---|--|-------|
| Curren Stratum | t Dioxin Category Current Dioxin | Summary n | Analysis Results for Log ₂ (C Adjusted Relative Risk (95% C.I.) ^b | urrent Dioxin + 1) p-Value | |
| No | Low Medium High | 147 115 65 | 3.4 7.0 9.2 | 1.40 (1.00,1.96) | 0.047 |
| Yes | Low Medium High | 149 177 231 | 6.0 4.5 3.5 | 0.91 (0.70,1.20) | 0.511 |

^a Relative risk for a twofold increase in initial dioxin.

Note: Model 2: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt. Model 4: Low = ≤ 8.1 ppt; Medium = >8.1-20.5 ppt; High = >20.5 ppt. Models 5 and 6: Low = ≤ 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

b Relative risk for a twofold increase in current dioxin.

^{--:} Adjusted relative risk, confidence interval, and p-value not presented due to zero abnormalities.

Table F-2-8.

Interaction Table for Systemic Neoplasms of Uncertain Behavior or Unspecified Nature

| (Current Dioxin-by-Asbestos Exposure: Table 10-18) Current Dioxin Category Summary Statistics Analysis Results for Log ₂ (Current Dioxin + | | | | | | | | |
|--|-------------------|-----|----------------|---|---------|--|--|--|
| Stratum | Current Dioxin | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ² | p-Value | | | |
| No | Low | 222 | 2.7 | 0.67 (0.42,1.09) | 0.110 | | | |
| | Medium | 209 | 1.4 | | | | | |
| | High | 216 | 0.9 | | | | | |
| Yes | Low | 71 | 0.0 | 2.18 (1.02,4.65) | 0.045 | | | |
| | Medium | 87 | 1.2 | | | | | |
| | High | 81 | 2.5 | • | | | | |

| | | | | URRENT DIOXIN — ADJUSTI Exposure: Table 10-18) | ED |
|---|-----------------------|-------------------|-------------------|---|----------------------------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (C Adjusted Relative Risk (95% C.I.) ² | urrent Dioxin + 1) p-Value |
| No | Low Medium High | 221 212 214 | 2.3 2.4 0.5 | 0.75 (0.54,1.05) | 0.092 |
| Yes | Low Medium High | 77 80 82 | 0.0 1.3 2.4 | 1.98 (0.96,4.09) | 0.064 |

| | | | | URRENT DIOXIN — ADJUSTE Exposure: Table 10-18) | D |
|---|-----------------------|-------------------|--|---|-------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | Analysis Results for Log ₂ (Cu Adjusted Relative Risk (95% C.I.) ² | rrent Dioxin + 1) p-Value | |
| No | Low Medium High | 221 212 214 | 2.3 2.4 0.5 | 0.72 (0.51,1.01) | 0.058 |
| Yes | Low Medium High | 76 80 82 | 0.0 1.3 2.4 | 1.93 (0.92,4.05) | 0.080 |

^a Relative risk for a twofold increase in current dioxin.

Note: Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt. Models 5 and 6: Low = ≤ 46 ppq; Medium = > 46-128 ppq; High = > 128 ppq.

Table F-2-9.

Interaction Table for Malignant Systemic Neoplasms (Eye, Ear, Face, Head, and Neck)

| a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED (Initial Dioxin-by-Lifetime Cigarette Smoking History: Table 10-19) | | | | | | | | | |
|---|------------------------------------|----------------|---|---|-------|--|--|--|--|
| Initial Diox | in Category S Initial Dioxin | Summary n | Analysis Results for Log Adjusted Relative Risk (95% C.I.) ^a | 2 ₂ (Initial Dioxin) p-Value | | | | | |
| 0 Pack-years | Low Medium High | 45 38 53 | 2.2 0.0 0.0 | 0.12 (0.00,7.11) | 0.309 | | | | |
| >0-10 Pack-years | Low Medium High | 50 44 66 | 4.0 0.0 0.0 | 0.12 (0.00,4.09) | 0.236 | | | | |
| >10 Pack-years | Low Medium High | 75 90 53 | 1.3 0.0 3.8 | 1.24 (0.58,2.67) | 0.576 | | | | |

| b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Lifetime Cigarette Smoking History: Table 10-19) | | | | | | | | |
|--|------------------|-----|----------------|---|---------|--|--|--|
| Stratum | Dioxin Category | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^b | p-Value | | | |
| 0 Pack-years | Comparison | 281 | 0.0 | | | | | |
| | Background RH | 109 | 0.9 | •• | | | | |
| | Low RH | 69 | 1.5 | | | | | |
| | High RH | 67 | 0.0 | | | | | |
| | Low plus High RH | 136 | 0.7 | | | | | |
| >0-10 Pack- years | Comparison | 324 | 0.0 | | | | | |
| • | Background RH | 109 | 0.0 | | | | | |
| | Low RH | 67 | 3.0 | | 0.029* | | | |
| | High RH | 93 | 0.0 | | | | | |
| | Low plus High RH | 160 | 1.3 | | | | | |
| >10 Pack- years | Comparison | 455 | 1.3 | | | | | |
| • | Background RH | 153 | 1.3 | 0.98 (0.18,5.21) | 0.982 | | | |
| | Low RH | 119 | 0.8 | 0.50 (0.06,4.37) | 0.534 | | | |
| | High RH | 99 | 2.0 | 2.30 (0.23,23.29) | 0.481 | | | |
| | Low plus High RH | 218 | 1.4 | 1.06 (0.24,4.72) | 0.936 | | | |

Table F-2-9. (Continued) Interaction Table for Malignant Systemic Neoplasms (Eye, Ear, Face, Head, and Neck)

| c) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Degreasing Chemical Exposure: Table 10-19) | | | | | | | | |
|--|------------------|-----|----------------|---|---------|--|--|--|
| Stratum | Dioxin Category | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^b | p-Value | | | |
| No | Comparison | 375 | 0.3 | | | | | |
| | Background RH | 181 | 0.6 | 2.14 (0.13,35.25) | 0.595 | | | |
| | Low RH | 94 | 4.3 | 15.44 (1.65,144.23) | 0.016 | | | |
| | High RH | 52 | 1.9 | 9.04 (0.53,155.09) | 0.129 | | | |
| | Low plus High RH | 146 | 3.4 | 13.63 (1.55,120.01) | 0.019 | | | |
| Yes | Comparison | 685 | 0.7 | | | | | |
| | Background RH | 190 | 1.1 | 1.67 (0.30,9.28) | 0.556 | | | |
| | Low RH | 161 | 0.0 | | | | | |
| | High RH | 207 | 0.5 | 0.85 (0.10,7.51) | 0.880 | | | |
| | Low plus High RH | 368 | 0.3 | 0.34 (0.04,3.07) | 0.340 | | | |

^a Relative risk for a twofold increase in initial dioxin.

Note: Model 2: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt.

Model 3: RH = Ranch Hand.

Comparison: Current Dioxin ≤10 ppt.

Background (Ranch Hand): Current Dioxin ≤10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Relative risk and confidence interval relative to Comparisons.

^{--:} Adjusted relative risk, confidence interval, and p-value not presented due to the sparse number of abnormalities.

^{*} P-value given is based on continuity-adjusted chi-square statistic from unadjusted analysis.

Table F-2-10.
Interaction Table for Malignant Systemic Neoplasms (Prostate)

| a) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Degreasing Chemical Exposure: Table 10-28) | | | | | | | | |
|--|------------------|-----|----------------|---|---------|--|--|--|
| Stratum | Dioxin Category | n | Percent Yes | Adjusted Relative Risk (95% C.I.) ^a | p-Value | | | |
| No | Comparison | 375 | 2.7 | | | | | |
| | Background RH | 181 | 0.0 | | | | | |
| • | Low RH | 94 | 4.3 | 0.92 (0.24,3.49) | 0.907 | | | |
| | High RH | 52 | 3.9 | 1.67 (0.30,9.45) | 0.560 | | | |
| | Low plus High RH | 146 | 4.1 | 1.09 (0.33,3.58) | 0.889 | | | |
| Yes | Comparison | 687 | 1.8 | | | | | |
| | Background RH | 191 | 2.6 | 1.24 (0.40,3.79) | 0.708 | | | |
| | Low RH | 161 | 1.2 | 0.37 (0.08,1.78) | 0.213 | | | |
| | High RH | 207 | 1.0 | 0.47 (0.10,2.26) | 0.348 | | | |
| | Low plus High RH | 368 | 1.1 | 0.41 (0.12,1.39) | 0.152 | | | |

| | | | | URRENT DIOXIN — ADJUSTE emical Exposure: Table 10-28) | ED . |
|--|-----------------------|-------------------|-------------------|--|----------------------------|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (Co Adjusted Relative Risk (95% C.L.) ^b | urrent Dioxin + 1) p-Value |
| No | Low Medium High | 152 111 64 | 0.0 3.6 3.1 | 1.95 (1.07,3.53) | 0.029 |
| Yes | Low Medium High | 141 185 233 | 2.1 2.2 0.9 | 0.69 (0.40,1.19) | 0.187 |

| | | | | URRENT DIOXIN — ADJUST emical Exposure: Table 10-28) | |
|--------------------|----------------------------------|-------------------|------------------------|---|-----------------------------|
| Current Stratum | Dioxin Category Current Dioxin | Summary n | Statistics Percent Yes | Analysis Results for Log ₂ (C Adjusted Relative Risk (95% C.I.) ^b | Current Dioxin + 1) p-Value |
| No | Low Medium High | 147 115 65 | 0.0 2.6 4.6 | 1.85 (1.09,3.16) | 0.024 |
| Yes | Low Medium High | 151 177 231 | 2.7 1.1 1.3 | 0.81 (0.54.1.20) | 0.289 |

Table F-2-10. (Continued) Interaction Table for Malignant Systemic Neoplasms (Prostate)

| | | | | URRENT DIOXIN — ADJUSTI emical Exposure: Table 10-28) | CD |
|--------------------|----------------------------------|-------------------|---|--|-------|
| Current Stratum | Dioxin Category Current Dioxin | Summary n | Analysis Results for Log ₂ (C Adjusted Relative Risk (95% C.I.) ^b | urrent Dioxin + 1) p-Value | |
| No | Low Medium High | 147 115 65 | 0.0 2.6 4.6 | 1.74 (0.99,3.05) | 0.053 |
| Yes | Low Medium High | 150 177 231 | 2.7 1.1 1.3 | 0.76 (0.49,1.16) | 0.201 |

^a Relative risk and confidence interval relative to Comparisons.

--: Adjusted relative risk, confidence interval, and p-value not presented due to the sparse number of abnormalities.

Note: Model 3: RH = Ranch Hand.

Comparison: Current Dioxin ≤10 ppt.

Background (Ranch Hand): Current Dioxin ≤10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt.

Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

^b Relative risk for a twofold increase in current dioxin.

Table F-2-11.
Interaction Table for Any Skin or Systemic Neoplasms

| a) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Eye Color: Table 10-38) | | | | | | | | | |
|---|-----------------------|-------------------|--|----------------------------|-------|--|--|--|--|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | Analysis Results for Log ₂ (Cu Adjusted Relative Risk (95% C.I.) ² | nrrent Dioxin + 1) p-Value | | | | | |
| Brown | Low Medium High | 78 97 110 | 47.4 41.2 31.8 | 0.90 (0.76,1.06) | 0.213 | | | | |
| Hazel or Green | Low Medium High | 81 82 79 | 40.7 53.7 55.7 | 1.24 (1.03,1.50) | 0.022 | | | | |
| Gray or Blue | Low Medium High | 132 108 106 | 46.2 . 51.9 34.9 | 0.90 (0.77,1.04) | 0.154 | | | | |

| b) MODEL 5: RANCH HANDS — CURRENT DIOXIN — ADJUSTED (Current Dioxin-by-Eye Color: Table 10-38) | | | | | | | | | |
|---|-----------------------|-------------------|----------------------|--|---------|--|--|--|--|
| Current Dioxin Category Summary Statistics Current Percent Stratum Dioxin n Yes | | | | Analysis Results for Log ₂ (Cu Adjusted Relative Risk (95% C.I.) ² | p-Value | | | | |
| Brown | Low Medium High | 81 95 109 | 49.4 36.8 33.9 | 0.90 (0.78,1.05) | 0.180 | | | | |
| Hazel or Green | Low Medium High | 83 83 76 | 41.0 50.6 59.2 | 1.22 (1.04,1.43) | 0.014 | | | | |
| Gray or Blue | Low Medium High | 132 106 108 | 46.2 46.2 40.7 | 0.94 (0.83,1.07) | 0.385 | | | | |

Table F-2-11. (Continued) Interaction Table for Any Skin or Systemic Neoplasms

| | | | | URRENT DIOXIN — ADJUSTE Color: Table 10-38) | D |
|----------------|------------------------------------|-------------------|------------------------|--|-------------------------------|
| Current Di | oxin Category Current Dioxin | Summary n | Statistics Percent Yes | Analysis Results for Log ₂ (Co Adjusted Relative Risk (95% C.I.) ² | urrent Dioxin + 1) p-Value |
| Brown | Low Medium High | 81 95 109 | 49.4 36.8 33.9 | 0.86 (0.74,1.00) | 0.055 |
| Hazel or Green | Low Medium High | 82 83 76 | 41.5 50.6 59.2 | 1.16 (0.98,1.36) | 0.087 |
| Gray or Blue | Low Medium High | 132 106 108 | 46.2 46.2 40.7 | 0.91 (0.80,1.04) | 0.186 |

^a Relative risk for a twofold increase in current dioxin.

Note: Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt. Models 5 and 6: Low = ≤ 46 ppq; Medium = > 46-128 ppq; High = > 128 ppq.

Table F-2-12.
Interaction Table for Prostate-Specific Antigen (ng/ml) (Continuous)

| a) MODEL 1: RANCH HANDS VS. COMPARISONS — ADJUSTED (Group-by-Insecticide Exposure: Table 10-40) | | | | | | | |
|---|--------------------------|--------------------------|------------|-------------------------------|--|----------------------|--|
| Stratum | Occupational Category | Group | n | Adjusted Mean ^a | Difference of Adjusted Means (95% C.I.) ^b | p-Value ^c | |
| No | All | Ranch Hand Comparison | 213 455 | 0.943 1.104 | -0.161 | 0.012 | |
| Yes | All | Ranch Hand Comparison | 687 768 | 1.087 1.024 | 0.063 | 0.152 | |
| No | Officer | Ranch Hand Comparison | 79 160 | 0.934 1.192 | -0.258 | 0.018 | |
| | Enlisted Flyer | Ranch Hand Comparison | 30 77 | 1.052 1.208 | -0.157 | 0.386 | |
| | Enlisted Groundcrew | Ranch Hand Comparison | 104 218 | 0.899 0.992 | -0.093 | 0.268 | |
| Yes | Officer | Ranch Hand Comparison | 269 316 | 1.225 1.107 | 0.118 | 0.101 | |
| | Enlisted Flyer | Ranch Hand Comparison | 121 121 | 1.157 1.111 | 0.047 | 0.668 | |
| | Enlisted Groundcrew | Ranch Hand Comparison | 297 331 | 0.921 0.900 | 0.022 | 0.690 | |

| | b) MODEL 2: | | HANDS — IN Dioxin-by-Age: | TTIAL DIOXIN — ADJUST Table 10-40) | TED |
|-------------|-------------------|----------|-------------------------------|---|----------------------------------|
| Initial | Dioxin Category S | ummary S | Statistics | Analysis Results for L | og ₂ (Initial Dioxin) |
| Stratum | Initial Dioxin | n | Adjusted Mean ^a | Adjusted Slope (Std. Error) ^d | p-Value |
| Born ≥ 1942 | Low | 54 | 0.776 | 0.002 (0.037) | 0.949 |
| | Medium | 71 | 0.664 | | |
| | High | 108 | 0.781 | | |
| Born < 1942 | Low | 113 | 1.267 | -0.094 (0.039) | 0.016 |
| | Medium | 95 | 1.072 | | |
| | High | 60 | 0.898 | | |

Table F-2-12. (Continued) Interaction Table for Prostate-Specific Antigen (ng/ml) (Continuous)

c) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Insecticide Exposure: Table 10-40)

| Stratum | Dioxin Category | n | Adjusted Mean ^a | Differences of Adjusted Means vs. Comparisons (95% C.I.) ^b | p-Value ^c |
|---------|------------------|-----|-------------------------------|---|----------------------|
| No | Comparison | 379 | 1.099 | | |
| | Background RH | 89 | 0.833 | -0.266 | 0.001 |
| | Low RH | 47 | 0.939 | -0.160 | 0.157 |
| | High RH | 66 | 0.962 | -0.137 | 0.165 |
| | Low plus High RH | 113 | 0.951 | -0.148 | 0.062 |
| Yes | Comparison | 635 | 1.009 | | |
| | Background RH | 267 | 1.036 | 0.027 | 0.612 |
| | Low RH | 197 | 1.095 | 0.087 | 0.159 |
| | High RH | 179 | 1.004 | -0.005 | 0.939 |
| | Low plus High RH | 376 | 1.050 | 0.041 | 0.408 |

^a Transformed from natural logarithm scale.

Note: Analysis based on measurements at or above 0.2 ng/ml (sensitivity limit) only.

Model 2: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt.

Model 3: RH = Ranch Hand.

Comparison: Current Dioxin ≤10 ppt.

Background (Ranch Hand): Current Dioxin ≤10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

^b Difference of means after transformation to original scale; confidence interval on difference of means not presented because analysis was performed on natural logarithm scale.

^c P-value is based on difference of means on natural logarithm scale.

^d Slope and standard error based on natural logarithm of prostate-specific antigen versus log₂ initial dioxin.

Table F-2-13.
Interaction Table for Prostate-Specific Antigen (Discrete)

| - | a) MODEL 1: RANCH HANDS VS. COMPARISONS — ADJUSTED (Group-by-Lifetime Cigarette Smoking History: Table 10-41) | | | | | | | |
|----------------------|---|--------------------------|------------|---------------------|----------------------------------|---------|--|--|
| Stratum | Occupational Category | Group | n | Percent Abnormal | Adj. Relative Risk (95% C.I.) | p-Value | | |
| 0 Pack-years | All | Ranch Hand Comparison | 254 353 | 3.9 4.8 | 0.85 (0.37,1.96) | 0.706 | | |
| >0-10 Pack- years | All | Ranch Hand Comparison | 296 384 | 4.7 5.0 | 1.16 (0.55,2.44) | 0.691 | | |
| >10 Pack- years | All | Ranch Hand Comparison | 392 540 | 2.3 4.8 | 0.47 (0.21,1.07) | 0.073 | | |
| 0 Pack-years | Officer | Ranch Hand Comparison | 131 194 | 4.6 5.7 | 0.97 (0.40,2.35) | 0.944 | | |
| | Enlisted Flyer | Ranch Hand Comparison | 25 27 | 4.0 3.7 | 0.84 (0.23,3.04) | 0.790 | | |
| | Enlisted Groundcrew | Ranch Hand Comparison | 98 132 | 3.1 3.8 | 0.53 (0.16,1.80) | 0.311 | | |
| >0-10 Pack- years | Officer | Ranch Hand Comparison | 95 142 | 7.4 7.0 | 1.43 (0.57,3.61) | 0.443 | | |
| | Enlisted Flyer | Ranch Hand Comparison | 52 61 | 5.8 8.2 | 1.24 (0.42,3.70) | 0.696 | | |
| | Enlisted Groundcrew | Ranch Hand Comparison | 149 181 | 2.7 2.2 | 0.79 (0.28,2.27) | 0.663 | | |
| >10 Pack- years | Officer | Ranch Hand Comparison | 134 166 | 3.0 4.8 | 0.58 (0.22,1.53) | 0.271 | | |
| | Enlisted Flyer | Ranch Hand Comparison | 83 114 | 4.8 7.0 | 0.50 (0.16,1.59) | 0.240 | | |
| | Enlisted Groundcrew | Ranch Hand Comparison | 175 260 | 0.6 3.9 | 0.32 (0.10,1.00) | 0.049 | | |

Table F-2-13. (Continued) Interaction Table for Prostate-Specific Antigen (Discrete)

| b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED (Dioxin Category-by-Insecticide Exposure: Table 10-41) | | | | | | | |
|--|------------------|-----|---------------------|---|---------|--|--|
| Stratum | Dioxin Category | n | Percent Abnormal | Adjusted Relative Risk (95% C.I.) ^a | p-Value | | |
| No | Comparison | 391 | 6.7 | | | | |
| | Background RH | 90 | 1.1 | 0.07 (0.01,0.60) | 0.015 | | |
| | Low RH | 48 | 2.1 | 0.14 (0.02,1.15) | 0.066 | | |
| | High RH | 67 | 7.5 | 0.81 (0.26,2.54) | 0.712 | | |
| | Low plus High RH | 115 | 5.2 | 0.45 (0.16,1.30) | 0.141 | | |
| Yes | Comparison | 653 | 4.0 | | | | |
| | Background RH | 275 | 2.6 | 0.47 (0.19,1.15) | 0.100 | | |
| | Low RH | 202 | 6.4 | 1.23 (0.58,2.59) | 0.593 | | |
| | High RH | 185 | 2.2 | 0.63 (0.21,1.92) | 0.414 | | |
| | Low plus High RH | 387 | 4.4 | 1.01 (0.51,1.98) | 0.986 | | |

| Current | Dioxin Category | Summary | Analysis Results for Log ₂ (Current Dioxin + | | |
|---------|-------------------|---------|---|---|---------|
| Stratum | Current Dioxin | n | Percent Abnormal | Adjusted Relative Risk (95% C.I.) ^b | p-Value |
| No | Low | 152 | 0.7 | 1.65 (1.04,2.61) | 0.033 |
| | Medium | 111 | 7.2 | | |
| | High | 64 | 4.7 | | |
| Yes | Low | 140 | 2.1 | 0.88 (0.61,1.26) | 0.492 |
| | Medium | 185 | 6.5 | | |
| | High | 233 | 2.2 | | |

Table F-2-13. (Continued) Interaction Table for Prostate-Specific Antigen (Discrete)

| | | | | RRENT DIOXIN — ADJUST mical Exposure: Table 10-41) | |
|---------|-------------------|---------|---------------------|---|---------------------|
| Curren | t Dioxin Category | Summary | Statistics | Analysis Results for Log ₂ (C | Current Dioxin + 1) |
| Stratum | Current Dioxin | n | Percent Abnormal | Adjusted Relative Risk (95% C.I.) ^b | p-Value |
| No | Low | 147 | 0.7 | 1.68 (1.13,2.52) | 0.011 |
| | Medium | 115 | 5.2 | | |
| | High | 65 | 7.7 | | |
| Yes | Low | 150 | 2.7 | 0.91 (0.66,1.24) | 0.550 |
| | Medium | 177 | 5.1 | | |
| | High | 231 | 3.0 | | |

| | | | | RRENT DIOXIN — ADJUSTI mical Exposure: Table 10-41) | ED |
|--------------------|----------------------------------|-------------------|---|--|-------|
| Current Stratum | Dioxin Category Current Dioxin | Summary n | Analysis Results for Log ₂ (C Adjusted Relative Risk (95% C.I.) ^b | urrent Dioxin + 1) p-Value | |
| No | Low Medium High | 147 115 65 | 0.7 5.2 7.7 | 1.61 (1.06,2.44) | 0.025 |
| Yes | Low Medium High | 149 177 231 | 2.7 5.1 3.0 | 0.87 (0.62,1.22) | 0.411 |

^a Relative risk and confidence interval relative to Comparisons.

Note: Model 3: RH = Ranch Hand.

Comparison: Current Dioxin ≤10 ppt.

Background (Ranch Hand): Current Dioxin ≤10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

Model 4: Low = ≤ 8.1 ppt; Medium = > 8.1-20.5 ppt; High = > 20.5 ppt.

Models 5 and 6: Low = \leq 46 ppq; Medium = >46-128 ppq; High = >128 ppq.

^b Relative risk for a twofold increase in current dioxin.